

Natural Gas Monthly

May 1998

Energy Information Administration
Office of Oil and Gas
U.S. Department of Energy
Washington, DC 20585

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Preface

The *Natural Gas Monthly (NGM)* is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Joan E. Heinkel.

General questions and comments regarding the *NGM* may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	IOGCC	Interstate Oil and Gas Compact Commission
Bbl	Barrels	LNG	Liquefied Natural Gas
BLS	Bureau of Labor Statistics, U.S. Department of Labor	Mcf	Thousand Cubic Feet
Bcf	Billion Cubic Feet	MMBtu	Million British Thermal Units
BOM	Bureau of Mines, U.S. Department of the Interior	MMcf	Million Cubic Feet
Btu	British Thermal Unit	MMS	United States Minerals Management Service, U.S. Department of the Interior
DOE	U.S. Department of Energy	NGL	Natural Gas Liquids
DOI	U.S. Department of the Interior	OCS	Outer Continental Shelf
EIA	Energy Information Administration, U.S. Department of Energy	STIFS	Short-Term Integrated Forecasting System
FERC	Federal Energy Regulatory Commission	STEO	Short Term Energy Outlook
		Tcf	Trillion Cubic Feet

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Deliverability on the Interstate Natural Gas Pipeline System

Executive Summary

The following article is the Executive Summary from the recently published report *Deliverability on the Interstate Natural Gas Pipeline System*, DOE/EIA-0618(98), prepared by the Office of Oil and Gas of the Energy Information Administration (EIA). The report may be accessed electronically from EIA's World Wide Web Site at http://www.eia.doe.gov/oil_gas/natural_gas/analysis_publications/deliverability/deliver.html. Printed copies of the report are available from the U.S. Government Printing Office (202) 512-1800 or through EIA's National Energy Information Center, Forrestal Building, Room 1F-048, Washington, DC 20585 (202) 586-8800.

Deliverability on the Interstate Natural Gas Pipeline System examines the capability of the interstate pipeline network to move natural gas to various markets within the United States, highlighting the changes that have occurred since 1990. Significant changes have occurred in the natural gas industry since the Energy Information Administration (EIA) published the predecessor to this report in 1992.¹ Fundamental changes in industry structure were imposed with the issuance of Order 636 in 1992 by the Federal Energy Regulatory Commission that allowed market forces and competition to become the primary factors influencing change in the natural gas marketplace. Several new concepts in natural gas trading and distribution have developed, such as the market center, and changes have been made in how certain network resources are being used in support of these system changes, such as open access to underground storage capacity.

For the most part, these changes have been positive. Total U.S. natural gas consumption has increased by 17 percent since 1990, marketed production has increased by 6 percent, net imports have nearly doubled, and the interstate pipeline system has increased in size and capability. Overall growth in the pipeline network has occurred in both its deliverability and usage levels. For instance, between 1990 and the end of 1996:

- **Deliverability (capacity) on the interstate pipeline system increased by more than 15 percent, or 10.9 billion cubic feet per day, at regional borders (Table SF1).** The largest increase in interregional deliverability was to the Western Region, with an additional 3.2 billion cubic feet (Bcf) per day, or 45 percent (Figure SF1). The second largest increase was 2.4 Bcf per day, 24 percent, into the Northeast Region. The development of so much capacity in the

West led to a surplus of capacity and an overall drop in the pipeline capacity usage rate, whereas in the Northeast, demand growth fully supported the increase. In fact, pipelines into the Northeast saw a substantial increase in average daily usage rates, up 6 percentage points from 1990 levels.

- **Pipeline utilization rates also increased, by 7 percentage points, reaching a high of 75 percent (on an average day) in 1996.** This increase in interregional pipeline use, occurring simultaneously with a major increase in pipeline capacity, would seem to indicate that demand for natural gas was growing faster than new capacity was being added and that, in some areas, occasional bottlenecks or periodic capacity constraints might have occurred or were developing. In other areas, the increase in pipeline usage rates simply reflected a greater use of existing capacity that had been previously underutilized because of overbuilding or a temporary dropoff in demand.
- **Reflecting its growing role in the U.S. natural gas market, Canadian import capacity into the United States increased by 69 percent, or 4.5 billion cubic feet per day.** It also represents the largest portion of new interregional pipeline capacity proposed for development during the next several years. Although it is unlikely that all projects will be built, more than 7.7 Bcf per day of import capacity expansion has been proposed, most of it feeding into the U.S. Midwest and Northeast regions. To a great degree, the proposals are driven by producers in Western Canada seeking markets for that region's expanding production capability. Plans to develop fields in the Sable Island area off the east coast of Canada have also triggered a need to find markets for that production as well. (Between 1990 and 1996, Canadian marketed natural gas production increased at an 8-percent annual rate, while natural gas end-use consumption in Canada increased at

¹Energy Information Administration, *Capacity and Service on the Interstate Natural Gas Pipeline System 1990: Regional Profiles and Analyses*, DOE/EIA-0556 (Washington, DC, June 1992).

Table SF1. Regional Summary of Changes in Interstate Pipeline Capacity, 1990-1996, and Planned Additions, 1997-2000

Region	Entering the Region ^a (MMcf/d)						Within the Region ^b (MMcf/d)					
	Capacity End of 1990	Capacity End of 1996	Percent Change 1990-96	Estimated Capacity Added in 1997	Proposed Additions to Capacity 1998-2000 ^c	Percent Change 1996-2000	Capacity End of 1990	Capacity End of 1996	Percent Change 1990	Estimated Capacity Added in 1997	Proposed Additions to Capacity 1998-2000	Percent Change 1996-2000
Central	11,824	12,824	8	3	3,012	23	20,754	23,593	14	1,143	1,081	9
Midwest	22,818	24,787	9	306	5,306	21	23,354	23,151	10	820	2,721	15
Northeast	10,009	12,403	24	24	4,973	40	29,261	32,966	13	364	5,037	16
Southeast	19,914	21,393	7	0	438	2	47,788	51,128	7	436	1,999	5
Southwest	2,048	2,869	40	180	115	10	43,583	45,072	3	2,341	1,461	8
Western	7,126	10,331	45	0	326	3	9,924	15,489	56	13	193	1
U.S. Total	73,739	84,606	15	513	14,170	17	174,664	191,399	10	3,874	12,492	9
Canada	1,277	2,609	104	0	1,300	50	NA	NA	NA	NA	NA	NA
Mexico	399	889	123	237	1,375	181	NA	NA	NA	NA	NA	NA

^aIncludes only the sum of capacity levels for the States and Canadian Provinces bounding the respective region.

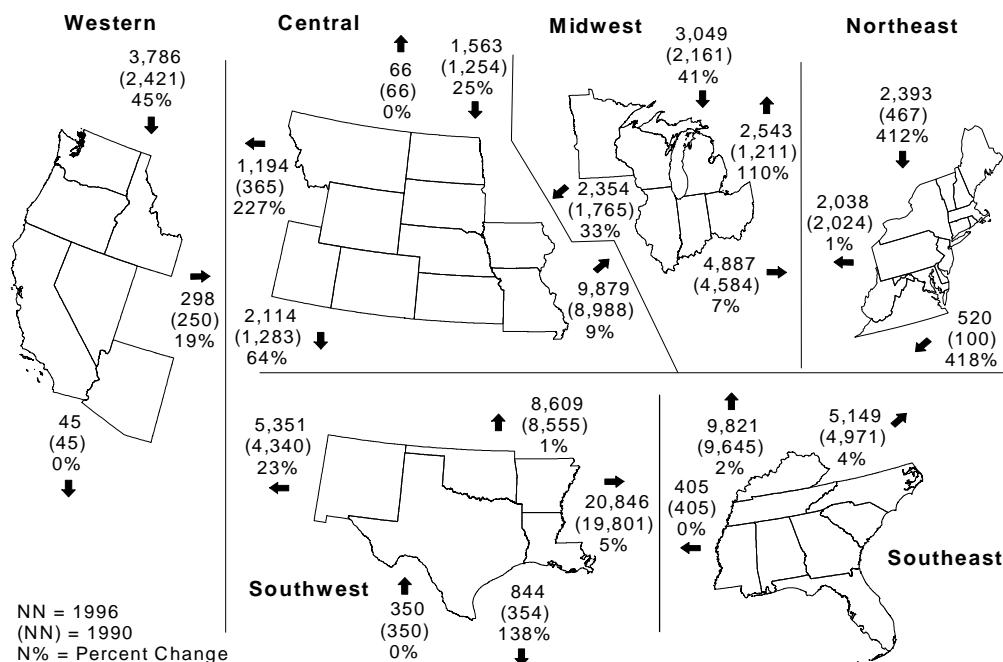
^bRepresents the sum of the interstate pipeline capacity, or planned capacity, on a State-to-State basis as measured at individual State border crossing points, exclusive of capacities "Entering the Region." Does not include projects that are entirely within one State. Gulf of Mexico projects are considered within the Southwest or Southeast region.

^cProposed capacity has been counted in only one region even though some projects may cross regional boundaries. In the case of a new line, the additional capacity has been included within the region in which it terminates. For an expansion project, the added capacity is included in the region where most of the expansion effort is focused.

MMcf/d = Million cubic feet per day. NA = Not available.

Sources: **Capacity:** Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997. **Capacity Additions:** EIAGIS-NG Geographic Information System, Natural Gas Pipeline Construction Database, as of March 1998, compiled from Federal Energy Regulatory Commission, Natural Gas Act Section 7(c) Filings, "Application for Certificate of Public Convenience and Necessity," and various natural gas industry news sources.

Figure SF1. Region-to-Region Natural Gas Pipeline Capacity, 1990 and 1996
(Volumes in Million Cubic Feet per Day)



Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.

only a 3.5-percent rate, thus the desire to expand export capabilities.)

Growth and changes in deliverability on the natural gas network have also resulted in some shifts in transportation corridors and access to production areas. Deliverability out of the Rocky Mountain area is increasing as producers there are seeking customers in expanding markets, such as the U.S. Midwest, to supplement their traditional markets in the Western Region. Likewise, producers and pipeline companies in the areas of West Texas and New Mexico have also shifted a larger portion of their capabilities toward Eastern markets.

In 1997, at least 41 natural gas pipeline projects were completed and placed in service in the United States, adding 6.3 Bcf per day of capacity overall, with 0.5 Bcf per day of that representing added interregional deliverability and 3.9 Bcf intraregional deliverability (Table SF1). A major portion of the new pipeline capacity represented increased receipt capability in expanding supply regions. For instance, the largest projects were in the Gulf of Mexico (3.2 Bcf per day) as offshore and deep-water development efforts in the area continue to expand. In addition, several major projects were completed that expanded access to the Wind River and Powder River basins of the Rocky Mountain area by almost 0.7 Bcf per day. The first new export lines to Mexico to be completed in 5 years were also placed in service during 1997. The increase in pipeline utilization levels since 1990 can be attributed in part to new trading and shipping arrangements that evolved with the introduction of pipeline open-access transportation and storage. The increased opportunities for trading, variable routing of gas shipments, and the development of new services to complement and expedite network operations have done much to improve the efficiency and utilization of available capacity. Several factors can be cited as contributing to the improvement, including:

- **Development of a release market for pipeline capacity, whereby unused firm capacity can be sublet by other shippers.** The pipeline capacity release market reached a level of about 3.6 trillion cubic feet in 1996 (the equivalent of 16 percent of available capacity). Before FERC Order 636, there was only limited experience with capacity brokering, which had been authorized by the Federal Energy Regulatory Commission in 1989.
- **Development of market centers.** Since 1990, when only one formal market center/hub was operational (the Henry Hub in Louisiana), more than 36 market centers have developed at strategic points within the North American pipeline grid. These centers have

contributed significantly to providing shippers greater access to lowest-cost gas supplies. Shippers now use market centers for rerouting gas supplies from one pipeline to another and also for access to services, such as short-term gas loans and parking, that facilitate gas trading and improve pipeline capacity usage. The Henry Hub, the Chicago Center (Illinois), and the Leidy Hub (Pennsylvania) are the three most active market centers in the United States today.

- **Improved access to underground storage.** Open access to underground storage services, mandated in Order 636, has also played a large role in improving the quality of transacting business on the natural gas pipeline network. The major trend in underground storage growth has been the increasing development of high-deliverability facilities, mostly salt cavern sites, which are designed to permit rapid access and turnover of stored inventory. These types of sites have become closely associated with market centers as they complement the short-term parking and loaning services offered by these centers. Since 1993, daily deliverability from salt cavern and other types of high-deliverability storage facilities has grown to represent more than 15 percent of total underground storage daily withdrawal capability, up from 10 percent. Practically all salt cavern storage sites are accessible from market centers.
- **Availability of electronic trading.** Another growing feature of the new natural gas marketplace is the increased use of computer-based electronic trading. Although there are only a few dominant systems in this marketplace, the number of trades conducted via electronic trading has grown steadily during the past several years. These systems bring together gas traders, capacity seller/buyers, and others at a number of optional points on the pipeline grid and assist the parties in carrying out their transactions. Most of the major market centers/hubs in North America, as well as a number of the most active spot-market trading points on the pipeline grid, are accessible to traders. Not to be forgotten, however, is trading on the non-electronic spot market, which still accounts for the large majority of trading activity covering short-term buying and selling of natural gas. Currently there are more than 120 trading points within the national pipeline network at which trading is conducted by open-market traders.

In the market for pipeline capacity, shippers prefer long-term contracts (a year or more in length) over short-term contracts and firm rather than interruptible transportation services. During the 12 months ended

March 31, 1997, about 78 percent of capacity was reserved under firm transportation contracts. However, not all of that capacity was used by the contract holders and, in addition, substantial firm transportation capacity is unsubscribed and available to shippers (27 trillion Btu per day, or 21 percent of maximum capability in 1997). Although this uncommitted capacity may not suit the needs of a particular shipper because of its location or term etc., it could support additional market growth beyond current levels. Shippers also have access to additional transportation services in which deliveries may not necessarily be guaranteed by the pipeline company. These services include capacity release and interruptible transportation service and are available to shippers depending on the actual use of the pipeline system by firm transportation customers. Marketers are the most active in the short-term and capacity release markets because these markets provide the flexibility to meet varying and unexpected demand levels.

Outlook

Based upon EIA natural gas consumption projections, the market for natural gas will continue to grow steadily into the next century. EIA forecasts about a 2-percent annual growth rate during the next 10 years (1999-2008). Excluding demand in the supply areas, this translates into a projected increase in consumption of nearly 1.2 trillion cubic feet by the year 2001.

In fact, the extensive number of currently planned capacity additions and expansion projects indicates that substantial activity is underway to address these potential increases in demand. If all the projects currently proposed through 2000 were built, interregional capacity would increase by as much as 14.7 billion cubic feet (Bcf) per day, or about 17 percent, from the level in 1996. Additional projects that are limited to providing service within a specific region comprise an additional 15.3 Bcf per day of capacity.

Natural gas consumption is projected to grow at a 5-percent annual rate in the Southeast Region through 2008, supported by anticipated growth in electric utility and industrial markets for natural gas. Markets in the Northeast and Midwest are projected to expand at

annual rates of only 3.3 and 1.6 percent, respectively. Current proposals to expand pipeline capacity into these regions between 1998 and 2000 amount to the equivalent of about 10.7 Bcf per day, with 5.3 Bcf per day directed to the Midwest, 5.0 Bcf to the Northeast, and 0.4 Bcf to the Southeast.

Based on current expansion proposals, the most extensive development of new capacity during the next several years will occur along the Canadian corridors. At least four new pipelines and several expansions are planned that will expand deliverability from Canada to the U.S. Midwest and Northeast markets and also to Canadian domestic markets. These lines will improve access to natural gas supplies in Western Canada and also create a new corridor to bring production from the developing fields off the coast of Eastern Canada (Sable Island) to Canadian and U.S. markets. These expansions could add between 5.9 and 7.0 Bcf per day to U.S. import capacity from Canada during the next 3 years along these corridors, an increase of more than 52 percent over 1997 levels.

Current interregional and State-to-State capacity levels, in most instances, appear to be adequate to meet current customer demands, although in a few instances average daily pipeline utilization rates increased significantly between 1990 and 1996. This rise in usage is a strong indicator that instances of peak-period capacity constraint could begin to occur if demand for natural gas in the affected markets were to increase at a faster rate than expected. Also, while the amount of new capacity proposed for the next several years appears to be adequate, and in some instances more than adequate, to meet forecasted demand, there will probably be some local areas with capacity constraints.

The capability of the pipeline network to transport and deliver gas from supply areas to ultimate consumers has grown measurably since 1990, and the quality and flexibility of service has improved as well. Substantial further growth in system capability is expected in light of the many expansion projects scheduled for completion during the next few years. Further integration, improved services, and more inter-connections along the grid should also help accommodate anticipated future demand.

Highlights

Overview

This issue of the *Natural Gas Monthly* presents the most recent estimates of natural gas data from the Energy Information Administration (EIA). Estimates extend through May 1998 for many data series. This issue also contains a reprint of the Executive Summary of the EIA report, "Deliverability on the Interstate Natural Gas Pipeline System." The report examines the capability of the interstate pipeline network to move natural gas to various markets within the United States.

Highlights of the data contained in this issue of the *Natural Gas Monthly* are:

- Cumulatively through May 1998, domestic production and net imports of natural gas are estimated to be somewhat higher than in 1997, 0.7 and 4.2 percent, respectively.
- Net injections of natural gas into underground storage facilities have been strong during April and May 1998, the first 2 months of the refill season. Cumulatively, net injections during these 2 months exceed those of 1997 by 64 percent.
- Cumulative end-use consumption through May 1998 is estimated to be 2.6 percent lower than in 1997.
- The national average wellhead price in February 1998 is estimated to be \$1.64 per thousand cubic feet, 33 percent lower than in February 1997.

Supply

Based on preliminary estimates through May 1998, both domestic production and net imports of natural gas are somewhat higher than last year at this time. Net injections into storage have also been strong at the beginning of the 1998 refill season (April through October), resulting in more than adequate supplies of working gas in underground storage facilities.

Dry natural gas production in May 1998 is estimated to be 1,631 billion cubic feet, or 52.6 billion cubic feet per

day (Table 1). This is slightly higher than the production rates in April 1998 and in May 1997. Cumulatively for January through May 1998, dry production is 0.7 percent higher than for the same period in 1997 (Figure HI1).

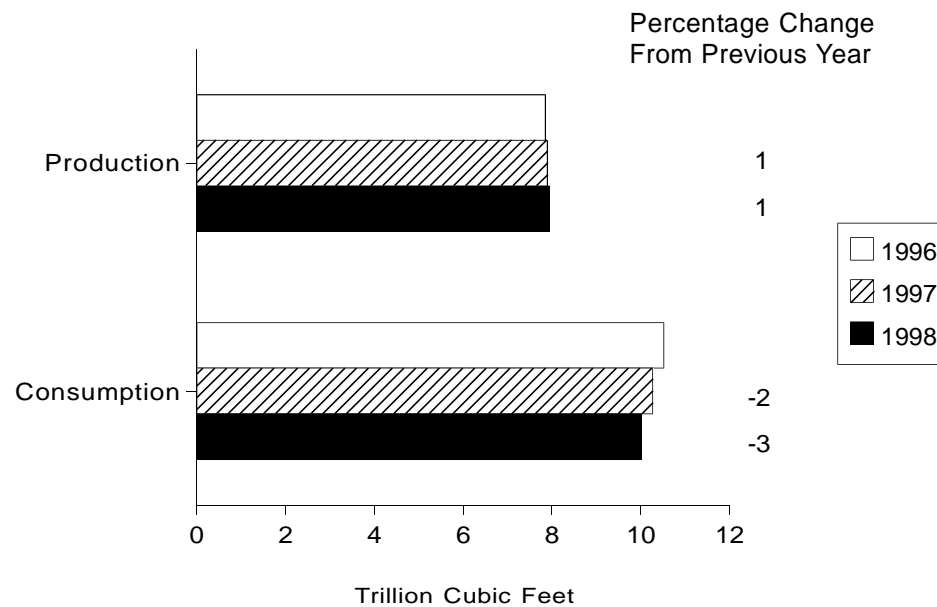
Net imports in May 1998 are estimated to be 240 billion cubic feet, or 7.7 billion cubic feet per day (Table 2). The monthly estimates of net imports in 1998 have exceeded those of 1997 in every month except February, when the 1998 level was only 3 billion cubic feet (1 percent) below that of February 1997. Cumulatively for January through May 1998, net imports are 4 percent higher than for the same period in 1997.

Net injections into storage (negative net withdrawals in Table 10) have been strong during the first 2 months of the 1998 refill season compared with recent years. Net injections during April 1998 are estimated to be 272 billion cubic feet. This is nearly five times the net injections during April 1997 and more than double those of April 1996. Net injections during May 1998 are estimated to be 350 billion cubic feet, or 9 percent higher than in May 1997. The 1996 refill season started with the lowest amount of working gas ever recorded—758 billion cubic feet as of March 31 (records of monthly storage levels begin in 1976), yet the combined net injections for April and May 1998 exceed those of 1996 by 40 percent. Working gas at the end of March 1998 is estimated to be 1,184 billion cubic feet (Figure HI2). Net injections have brought working gas to an estimated 1,806 billion cubic feet at the end of May 1998, 33 percent higher than at this time last year. (Also see the box on page 6 for a review of events in the natural gas industry during the winter of 1997-98).

End-Use Consumption

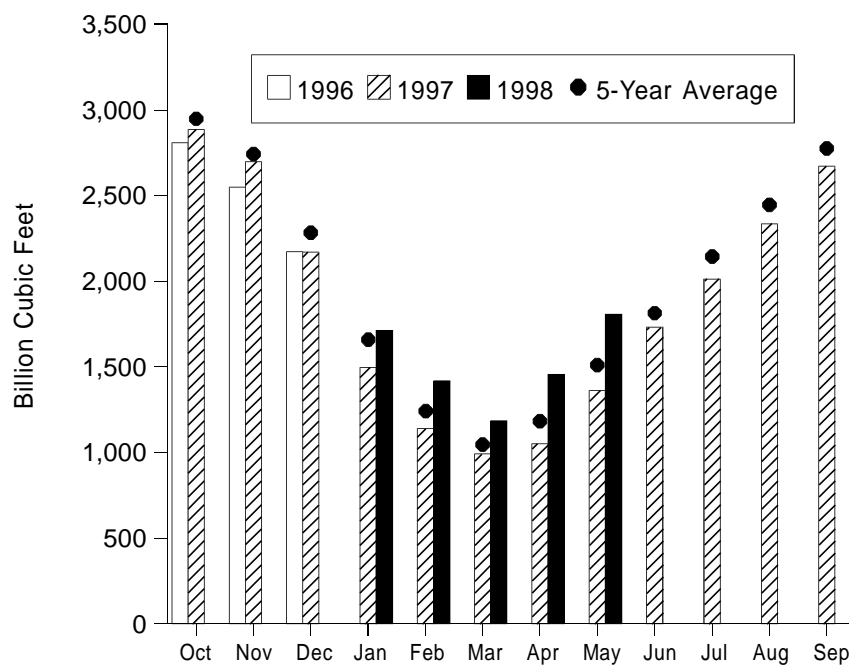
End-use consumption of natural gas by all sectors in May 1998 is estimated to be 1,409 billion cubic feet, 2 percent lower than in May 1997 (Table 3). Cumulatively for January through May 1998, end-use consumption is estimated to be 244 billion cubic feet (3 percent) lower than for the same period in 1997. The cumulative decline is led

Figure HI1. Natural Gas Production and Consumption, January-May, 1996-1998



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1996-1998



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

by an estimated reduction of 178 billion cubic feet (6 percent) in the residential sector, while the industrial sector has consumed 57 billion cubic feet (2 percent) less and the commercial sector 48 billion cubic feet (3 percent) less than during the same period in 1997 (Figure HI3).

Estimates of natural gas consumption in May 1998 in the residential and commercial sectors are 252 and 194 billion cubic feet, respectively. These levels are 12 and 8 percent lower, respectively, than in May 1997. Industrial natural gas consumption in May 1998 is estimated to be 699 billion cubic feet, 2 percent lower than in May 1997.

Estimates of natural gas consumption by electric utilities are now available through February 1998. Electric utility consumption is typically at its lowest during the winter months when the demand for natural gas for space heating in the residential and commercial sectors is at its highest. Electric utilities consumed an estimated 134 billion cubic feet of natural gas in February 1998, 6 percent lower than in February 1997. However, consumption in January was estimated to be 23 percent higher than in January 1997, so cumulatively through February, electric utilities are estimated to have consumed 8 percent more natural gas in 1998 than in 1997.

Prices

The average natural gas wellhead price in February 1998 is estimated to be \$1.64 per thousand cubic feet, 33 percent lower than in February 1997 (Table 4). This difference is largely the result of different patterns in monthly prices during the 1996-97 heating season compared with 1997-98. The average wellhead price increased sharply in the fall of 1996, reaching a peak of \$3.42 per thousand cubic feet in January 1997. In contrast, the wellhead price

rose only slightly from October to November 1997, then declined 22 percent to \$2.17 per thousand cubic feet in December 1997. Price estimates for both January and February 1998 are below that of December 1997 and well below the levels of a year earlier.

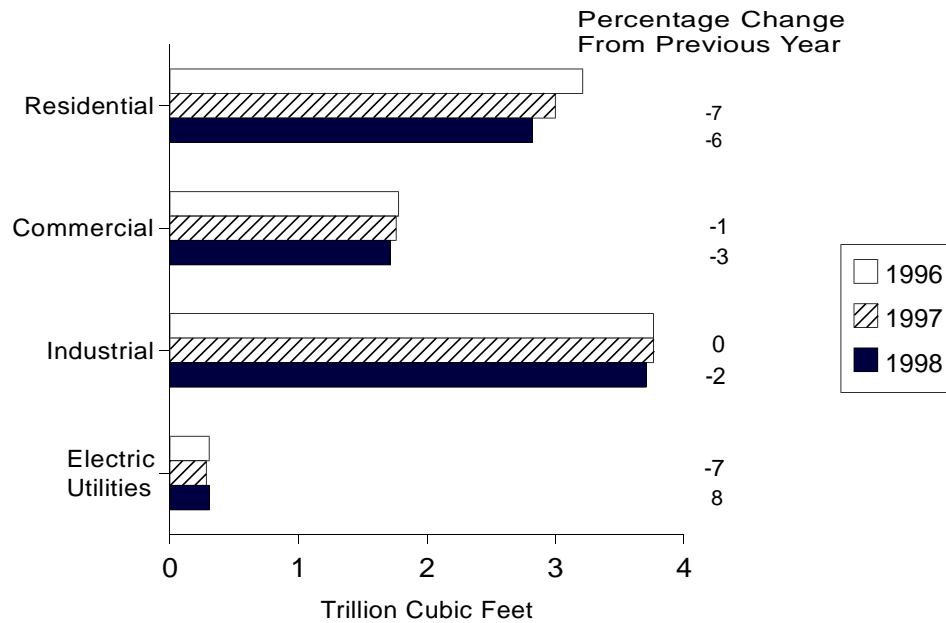
End-use price estimates for February 1998 are also lower than a year ago in the residential, commercial, and industrial sectors, as is the average price paid by electric utilities in January 1998. Average residential and commercial natural gas prices¹ are estimated to be \$6.40 and \$5.56 per thousand cubic feet, respectively, in February 1998. These levels are relatively unchanged from the estimates for January 1998, but are 6 and 9 percent lower, respectively, than in February 1997. The average price of natural gas to industrial users is estimated to be \$3.60 per thousand cubic feet in February 1998, just below the estimate in January 1998 but 14 percent lower than in February 1997. (Also see Figure HI4.)

The average price of natural gas paid by electric utilities is estimated to be \$2.64 per thousand cubic feet in January 1998. This is 35 percent lower than in January 1997, yet prices in early 1997 were extraordinarily high. The January 1998 estimate is only 8 percent lower than the price in January 1996.

Daily settlement prices on the nearby month futures contract at the Henry Hub generally have been declining since early April 1998. During 1997, prices in early April were at a lower level than in 1998, but rose steadily through the month and remained above \$2.20 per million Btu during May. Thus, prices on the June 1998 contract during its last month of trading are below the levels of last year (Figure HI5). The June 1998 contract settled at \$2.094 per million Btu on Friday, May 22, 1998, with 3 days of trading remaining. The final settlement price on the June 1997 contract was \$2.346 per million Btu.

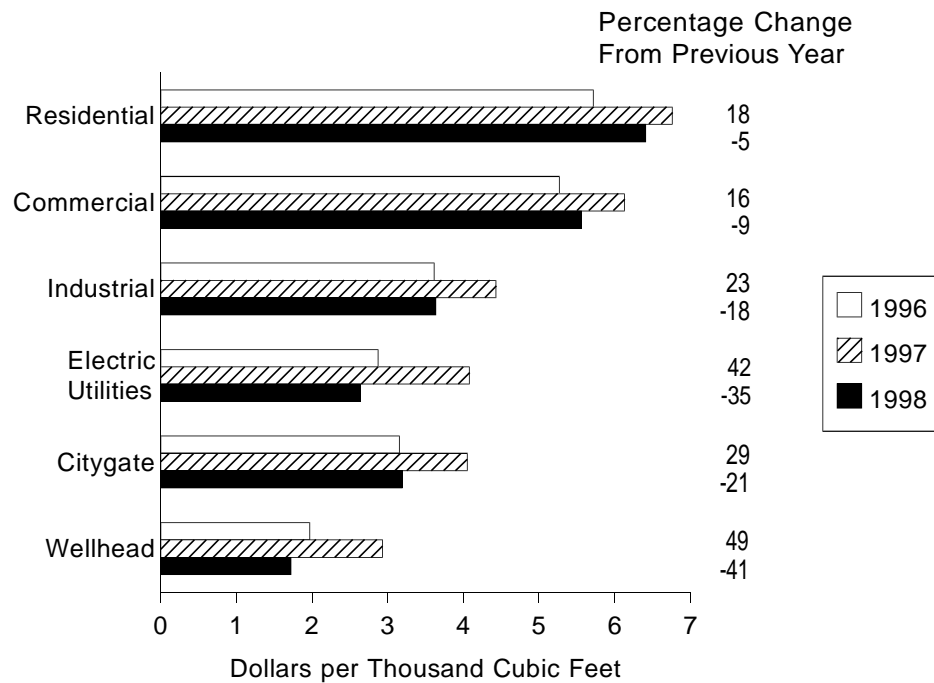
¹End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1997 they were from 57 to 78 percent of commercial deliveries and only 14 to 19 percent of industrial deliveries (Table 4).

Figure HI3. Natural Gas Delivered to Consumers, January-May, 1996-1998



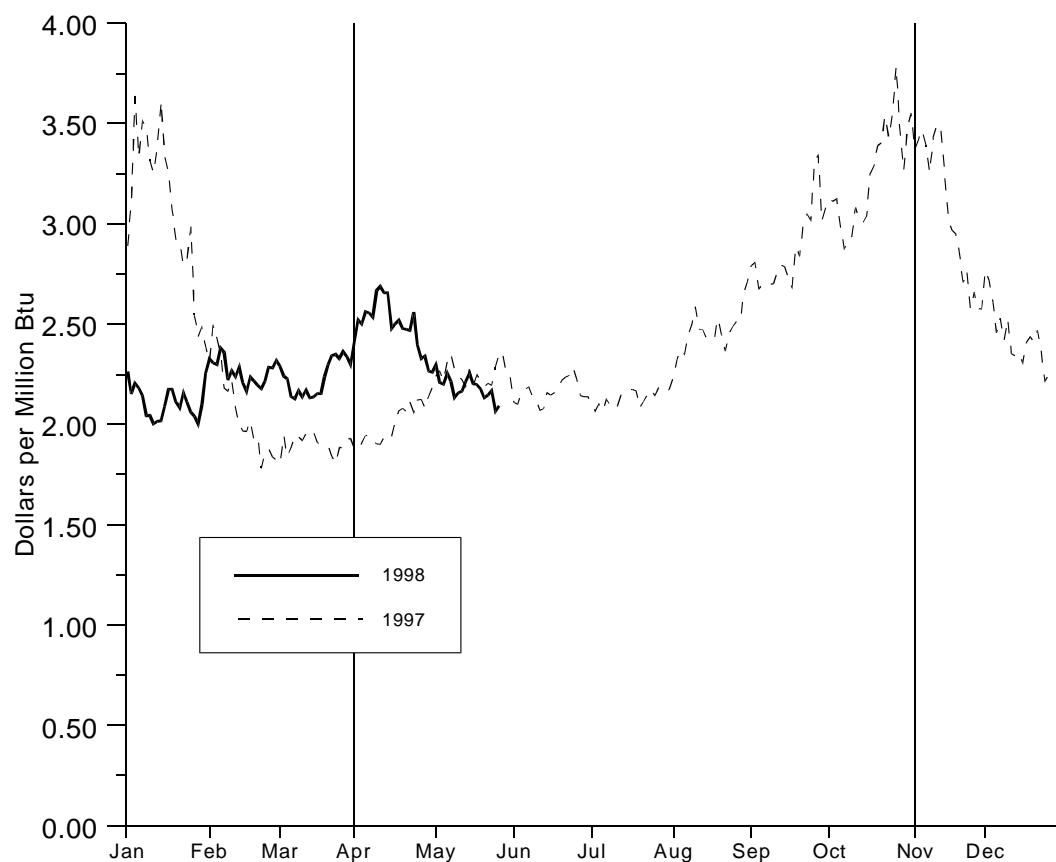
Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-February 1996-1998



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..
Source: Table 4.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.

Recap of the 1997-98 Heating Season

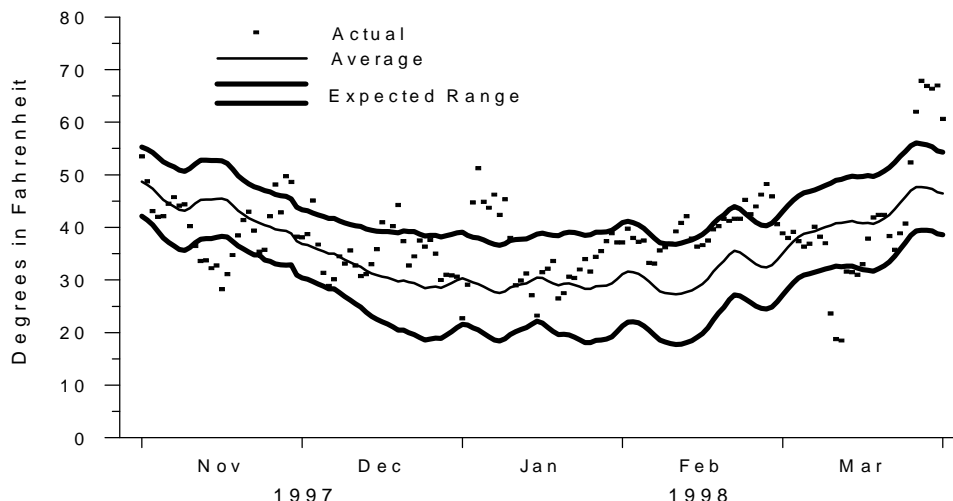
The past winter was highlighted by sharply increasing prices at the beginning of the heating season brought about by concerns regarding natural gas supplies. Unseasonably cool temperatures in early November were followed by generally moderate weather that resulted in temperatures that were 9 percent warmer than normal over the 5-month period (November through March). The consistently mild weather reduced consumption, lessened supply concerns, and brought about steadily decreasing prices.

The early price increases were brought about by several factors, including: coal delivery problems to electric utilities in the Southwest (natural gas was the primary alternative fuel), concern about the lack of growth in available gas supply, and relatively low storage levels following a slow refill rate in July. This led to sharp price increases even before the start of the heating season on November 1. The wellhead price rose more than 20 percent between September and October (\$2.22 vs. \$2.70 per thousand cubic feet) and attained its highest level of the heating season in November (\$2.77). Consumption in the residential sector decreased almost 160 billion cubic feet, or 4 percent, compared with the previous heating season. Overall consumption decreased by less than 2 percent as the strong economy sustained demand for natural gas from the industrial and electric utility sectors. Stocks of working gas in storage were over 1,700 billion cubic feet at the end of January—215 billion cubic feet more than last year at the same time—and the average wellhead price declined in February to \$1.64 per thousand cubic feet.

Weather was 9 percent warmer than normal

The past winter was dominated by one of the largest “El Nino” weather patterns of this century. According to National Weather Service (NWS) data, November was the only month that recorded colder-than-normal weather (11 percent) during the past heating season, as temperatures gradually moderated in the succeeding months. December was 4 percent warmer than normal, while January and February temperatures approached record highs on some days resulting in a 2-month period that was 20 percent warmer than normal. Average temperatures in the four major gas-consuming metropolitan areas (Chicago, Kansas City, New York City, and Pittsburgh) monitored in EIA’s *Natural Gas Weekly Market Update* were average or below average on fewer than 10 days during the 2-month period (see following graph). Interestingly, some of the coldest temperatures of the season occurred in early March as the Southeast and the West South Central regions of the country were 9 to 16 percent colder than normal for the month. Nationally, the NWS reported that the country was about 1 percent warmer than normal for March.

Average Temperature for Four Gas-Consuming Metro Areas (Chicago, Kansas City, New York, and Pittsburgh)



Note: The bounds are computed by adding and subtracting from the average temperatures for the last 10 years an amount equal to twice an estimate of the standard deviation for temperatures on a day.

Recap of the 1997-98 Heating Season (Continued)

Natural gas wellhead prices peaked early in the season

Natural gas wellhead prices during this past winter displayed a somewhat unique pattern, reaching their highest levels in the October/November time frame at \$2.70 and \$2.77 per thousand cubic feet (Mcf), respectively (Table 4). The expected pattern is for the season's highest prices to occur in December and January, as during the previous winter (1996-97) when wellhead prices averaged \$3.26 and \$3.42 per Mcf, respectively. Instead, this past year, prices began to increase sharply in September 1997, averaging 2.22 per Mcf for the month compared with \$1.85 in September 1996. The market's concerns surrounding these issues resulted in the NYMEX futures contract price for November delivery at the Henry Hub closing at \$3.346 per million Btu (MMBtu) (Figure HI5)—almost \$0.90 higher than the November 1996 price. At the same time, the price on the Henry Hub spot market was over \$3.65 per MMBtu for several days in early November. However, following moderating temperatures in the last half of November and continuing weather forecasts calling for a warmer-than-normal winter, prices began to trend down. The wellhead price in December declined to \$2.17 per Mcf, while the futures contract closed at \$3.262 per MMBtu. With the arrival of the unseasonably warm January weather, the drop in prices accelerated. The January wellhead price was \$1.79 per Mcf and the February futures contract closed at \$2.00 per MMBtu. Spot prices at the Henry Hub traded near \$2.00 most days in January and February. The cold weather in early March had relatively little impact on prices as it arrived so late in the heating season and the level of working gas in storage at the end of February was more than 1,400 billion cubic feet, almost 300 billion cubic feet more than last year at the same time.

The price of natural gas to residential end users was 4.5 percent higher during the first 2 months of the past heating season compared with the same period in the previous year (\$6.71 vs. \$6.42 per Mcf). In response to price declines in the wellhead, spot, and NYMEX futures contract markets, prices to the residential consumer moved down in January and February to an average of \$6.41 per Mcf.

Storage level ended the season 20 percent above that in 1997

Gas storage inventories at the start of the past heating season were 2,886 billion cubic feet, marking the third consecutive year that the working gas level was less than 3.0 trillion cubic feet at the conclusion of the refill season (April to October). Again, this relatively low working gas level raised concerns about whether or not storage stocks would be adequate to meet demand in the approaching winter. But the warmer and wetter winter season reduced the demand for storage gas and stocks remained more than adequate throughout the winter. EIA storage data through March 1998 indicate that net withdrawals during the 1997-98 heating season were 1,730 billion cubic feet (Bcf)—105 Bcf less than during the previous heating season and almost 600 Bcf less than 2 years earlier. At the end of March 1998, 1,184 Bcf of gas remained in storage. This is 193 Bcf more than last year and 426 Bcf more than at the end of March 1996.

Even with almost 1,200 Bcf in storage at the end of March, the refill season began aggressively in April. EIA estimates that almost 622 Bcf was added to working gas storage levels in April and May. This robust rate of refill is 243 Bcf or 64 percent more than in April and May of last year. In order to meet a typical beginning-of-heating-season working gas level of between 2.8 and 3.0 trillion cubic feet, the refill rate between June and October will need to average almost 220 Bcf per month. Last year's average monthly refill rate during that 5-month period was more than 300 Bcf per month.

Table 1. Summary of Natural Gas Production in the United States, 1992-1998
(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production (Wet)	Extraction Loss ^b	Dry Gas Production ^c
1992 Total	22,132	2,973	280	168	18,712	872	17,840
1993 Total	22,726	3,103	414	227	18,982	886	18,095
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996							
January	2,052	310	44	26	1,673	81	1,591
February	1,941	294	41	24	1,580	77	1,504
March	2,054	313	45	23	1,674	81	1,592
April	2,003	289	42	22	1,650	80	1,570
May	2,025	281	42	23	1,679	81	1,598
June	1,962	276	36	16	1,634	79	1,555
July	2,008	271	42	24	1,672	81	1,591
August	2,021	281	45	24	1,671	81	1,590
September	1,958	283	44	22	1,609	78	1,531
October	2,011	306	44	23	1,638	79	1,558
November	1,984	299	47	23	1,615	78	1,537
December	2,032	307	46	23	1,656	80	1,576
Total	24,052	3,510	518	272	19,751	958	18,793
1997							
January	^E 2,094	^E 327	^E 41	^E 21	^E 1,704	^E 79	^E 1,625
February	^E 1,910	^E 301	^E 38	^E 19	^E 1,553	^E 72	^E 1,480
March	^E 2,098	^E 322	^E 43	^E 23	^E 1,711	^E 80	^E 1,631
April	^E 1,985	^E 296	^E 42	^E 21	^E 1,626	^E 76	^E 1,550
May	^E 2,070	^E 313	^E 42	^E 21	^E 1,693	^E 79	^E 1,614
June	^E 1,967	^E 294	^E 40	^E 20	^E 1,612	^E 75	^E 1,537
July	^E 2,032	^E 295	^E 42	^E 22	^E 1,674	^E 78	^E 1,596
August	^E 2,009	^E 283	^E 42	^E 22	^E 1,663	^E 77	^E 1,585
September	^E 1,970	^E 294	^E 42	^E 21	^E 1,613	^E 75	^E 1,538
October	^E 2,033	^E 318	^E 44	^E 22	^E 1,650	^E 77	^E 1,573
November	^{RE} 2,012	^E 308	^E 43	^E 22	^{RE} 1,640	^{RE} 76	^{RE} 1,563
December	^{RE} 2,110	^E 334	^E 44	^{RE} 24	^{RE} 1,708	^{RE} 80	^{RE} 1,629
Total	^{RE} 24,292	^E 3,685	^E 503	^{RE} 258	^E 19,846	^E 925	^E 18,921
1998							
January	^{RE} 2,095	^{RE} 331	^{RE} 43	^E 23	^{RE} 1,698	^{RE} 79	^{RE} 1,619
February	^{RE} 1,927	^{RE} 305	^{RE} 40	^E 21	^E 1,562	^E 73	^E 1,489
March	^E 2,132	^E 337	^E 44	^E 23	^E 1,728	^E 81	^E 1,647
April(STIFS)	NA	NA	NA	NA	^E 1,646	^E 79	^E 1,566
May(STIFS)	NA	NA	NA	NA	^E 1,714	^E 83	^E 1,631
1998 YTD	NA	NA	NA	NA	^E 8,348	^E 395	^E 7,953
1997 YTD	^E 10,156	^E 1,559	^E 206	^E 105	^E 8,286	^E 386	^E 7,900
1996 YTD	10,075	1,487	214	118	8,255	400	7,855

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

^b Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Equal to marketed production (wet) minus extraction loss.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*. January 1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1992-1998
(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels ^a	Net Imports	Net Storage Withdrawals ^b	Balancing Item ^c	Consumption ^d
1992 Total	17,840	118	1,921	173	-508	19,544
1993 Total	18,095	119	2,210	-36	-110	20,279
1994 Total	18,821	111	2,462	-286	-400	20,708
1995 Total	18,599	110	2,687	415	-230	21,581
1996						
January	1,591	12	249	723	-2	2,574
February	1,504	11	221	462	138	2,335
March	1,592	11	226	333	46	2,209
April	1,570	9	227	-119	139	1,826
May	1,598	6	244	-339	67	1,576
June	1,555	8	214	-388	65	1,454
July	1,591	8	222	-382	-3	1,436
August	1,590	8	221	-358	4	1,465
September	1,531	8	227	-379	12	1,399
October	1,558	9	236	-210	-62	1,531
November	1,537	10	238	272	-161	1,896
December	1,576	10	259	387	35	2,266
Total	18,793	109	2,784	2	279	21,967
1997						
January	^E 1,625	^E 13	264	684	^R 64	^R 2,521
February	^E 1,480	^E 11	231	358	^R 175	^R 2,255
March	^E 1,631	^E 10	243	155	^R 64	^R 2,104
April	^E 1,550	^E 9	221	-58	^R 71	^R 1,792
May	^E 1,614	^E 9	229	-321	^R 69	^R 1,601
June	^E 1,537	^E 7	226	-364	^R 38	^R 1,444
July	^E 1,596	^E 8	222	-281	^R 15	^R 1,560
August	^E 1,585	^E 9	231	-322	^R 25	^R 1,528
September	^E 1,538	^E 7	232	-336	^R 7	^R 1,448
October	^E 1,573	^E 9	234	-211	^R 76	^R 1,529
November	^{RE} 1,563	^E 11	254	189	^R 134	^R 1,884
December	^{RE} 1,629	^E 12	246	533	^R 106	^R 2,314
Total	^E 18,921	^E 116	2,833	27	^R 84	^R 21,981
1998						
January	^{RE} 1,619	^E 12	^{RE} 270	466	^{RE} 9	^R 2,376
February	^E 1,489	^E 10	^E 228	299	^{RE} 46	2,072
March	^E 1,647	^E 11	^E 257	241	^E 39	^E 2,195
April(STIFS)	^E 1,566	^E 10	^E 245	^{RE} 272	^{RE} 259	^E 1,808
May(STIFS)	^E 1,631	^E 9	^E 240	^E 350	^E 33	^E 1,563
1998 YTD	^E 7,953	^E 52	^E 1,239	^E 385	^E 386	^E 10,013
1997 YTD	^E 7,900	^E 52	1,189	818	315	10,274
1996 YTD	7,855	49	1,167	1,060	388	10,519

^a Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0025 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

^b Monthly and annual data for 1991 through 1996 include underground storage and liquefied natural gas storage. Data for January 1997 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

^c Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

^d Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 3.

^R = Revised Data.

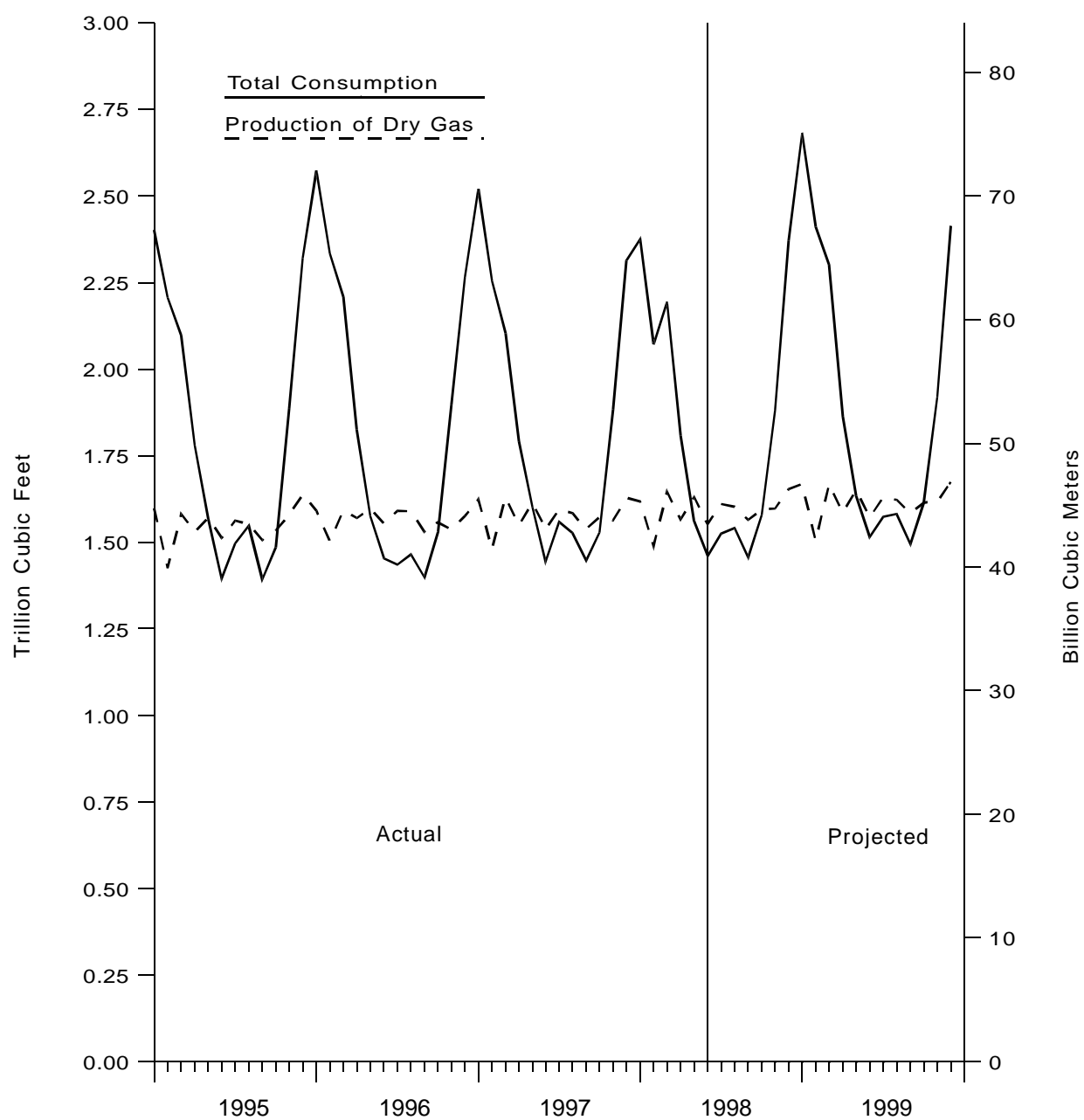
^E = Estimated Data.

^{RE} = Revised Estimated Data.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*, 1994-1995: EIA: Form EIA-627, "Annual Quantity and Value of Natural Gas Report" (1995 data only), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, "Monthly Underground Gas Storage Report," Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," EIA computations and *Natural Gas Annual 1996*. January 1997 through current month: EIA, Form EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports. See Appendix A for discussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1995-1999



Sources: 1995 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook* (October 1997).

Table 3. Natural Gas Consumption in the United States, 1992-1998
(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel ^a	Pipeline Fuel ^b	Delivered to Consumers					Total Consumption
			Residential	Commercial	Industrial	Electric Utilities	Total	
1992 Total	1,171	588	4,690	^c 2,803	7,527	2,766	17,786	19,544
1993 Total	1,172	624	4,956	^c 2,863	7,981	2,682	18,483	20,279
1994 Total	1,124	685	4,848	^c 2,897	8,167	2,987	18,899	20,708
1995 Total	1,220	700	4,850	^c 3,034	8,580	3,197	19,660	21,581
1996								
January	106	85	934	480	800	168	2,382	2,574
February	101	77	831	443	747	137	2,158	2,335
March	106	72	705	387	781	156	2,030	2,209
April	104	59	474	284	736	170	1,663	1,826
May	106	50	271	183	701	264	1,420	1,576
June	102	46	162	133	710	299	1,305	1,454
July	105	46	124	126	677	358	1,285	1,436
August	105	47	118	123	704	367	1,312	1,465
September	102	45	138	124	706	285	1,253	1,399
October	104	49	243	171	737	226	1,378	1,531
November	103	62	503	295	764	170	1,732	1,896
December	105	74	738	409	807	132	2,086	2,266
Total	1,250	711	5,241	^c 3,161	8,870	2,732	20,006	21,967
1997								
January	^E 107	82	^R 907	480	^R 806	139	^R 2,333	^R 2,521
February	^E 97	73	^R 767	^R 428	747	143	^R 2,085	^R 2,255
March	^E 107	68	^R 606	^R 367	^R 766	190	^R 1,929	^R 2,104
April	^E 102	58	^R 435	^R 273	732	193	^R 1,633	^R 1,792
May	^E 106	52	^R 286	^R 212	714	231	^R 1,443	^R 1,601
June	^E 101	^R 47	^R 161	^R 159	681	296	^R 1,296	^R 1,444
July	^E 105	^R 51	131	^R 151	^R 695	428	^R 1,404	^R 1,560
August	^E 104	49	119	^R 147	716	391	^R 1,374	^R 1,528
September	^E 101	47	132	^R 147	688	333	^R 1,300	^R 1,448
October	^E 103	50	236	188	^R 706	246	^R 1,376	^R 1,529
November	^E 103	61	^R 499	^R 317	724	180	^R 1,720	^R 1,884
December	^E 107	75	731	^R 413	790	199	^R 2,132	^R 2,314
Total	^E 1,242	^R 712	^R 5,009	^R 3,282	^R 8,766	2,969	^R 20,027	^R 21,981
1998								
January	^{RE} 106	77	799	^R 446	^R 777	171	^R 2,192	^R 2,376
February	^E 98	67	675	401	698	134	1,908	2,072
March(STIFS)	^E 106	^E 68	^E 660	^E 386	^E 798	NA	^E 2,021	^E 2,195
April(STIFS)	^E 101	^E 57	^E 436	^E 285	^E 736	NA	^E 1,650	^E 1,808
May(STIFS)	^E 104	^E 50	^E 252	^E 194	^E 699	NA	^E 1,409	^E 1,563
1998 YTD^d	^E 515	^E 319	^E 2,822	^E 1,713	^E 3,708	305	^E 9,179	^E 10,013
1997 YTD	^E 519	333	3,000	1,761	3,765	283	9,423	10,274
1996 YTD	523	343	3,215	1,777	3,765	305	9,652	10,519

^a Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^b Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption (excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Vehicle fuel deliveries, in billion cubic feet, were 0.4 in 1991, 0.5 in 1992, 1.0 in 1993, 1.7 in 1994, 2.7 in 1995 and 2.9 in 1996.

^d Year-to-date volume represents months for which volume information is available in the current year.

^R = Revised Data.

^E = Estimated Data.

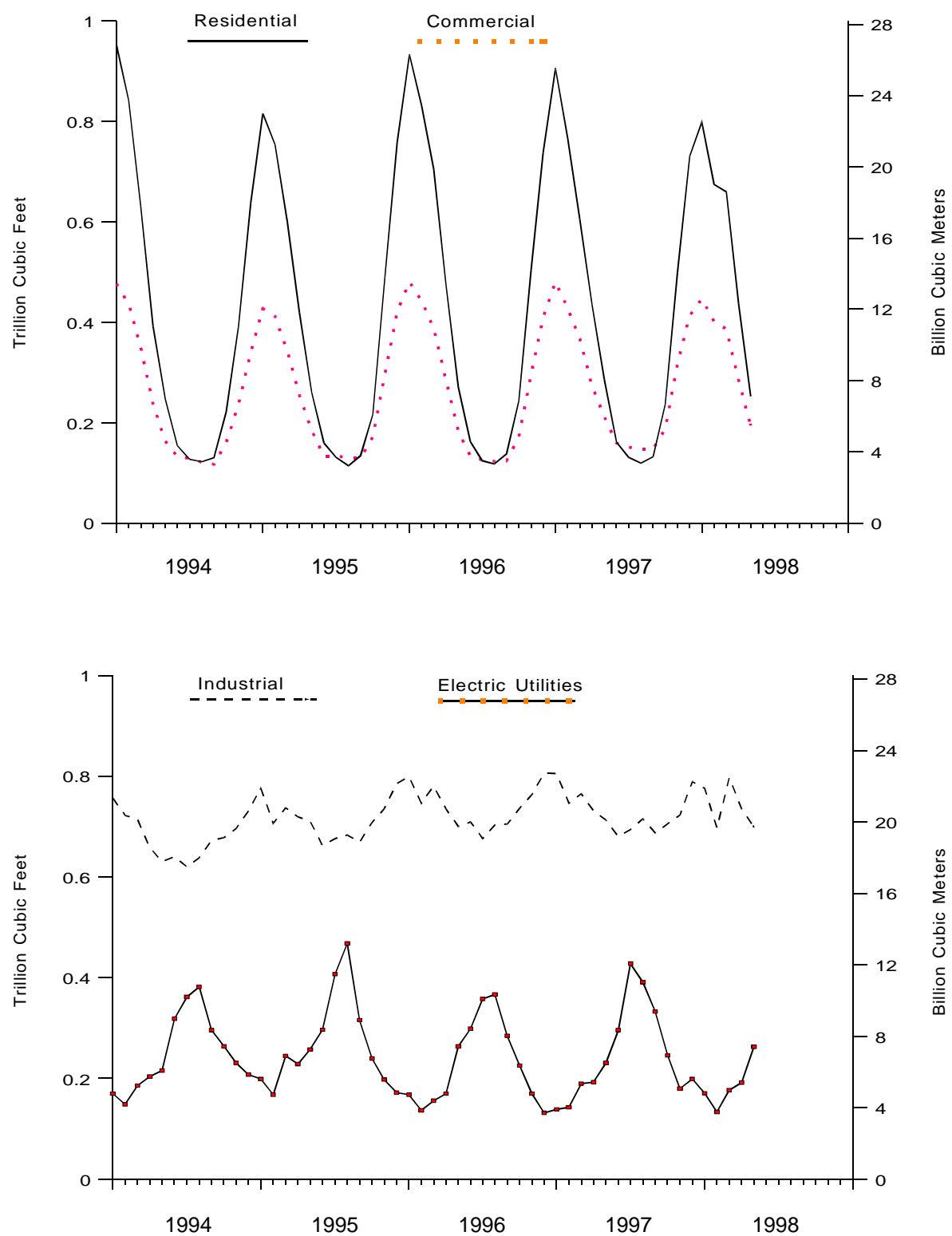
^{RE} = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1992-1996: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1996*. January 1997 through the current month: EIA: Form 895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1994-1998



Sources: *Natural Gas Annual*, Form EIA-857, and Form EIA-759.

Table 4. Selected National Average Natural Gas Prices, 1992-1998
(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price ^a	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total ^b	Price	% of Total ^b	
1992 Annual Average	1.74	3.01	5.89	4.88	83.2	2.84	30.3	2.36
1993 Annual Average	2.04	3.21	6.16	5.22	83.9	3.07	29.7	2.61
1994 Annual Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995 Annual Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996								
January	2.05	3.14	5.64	5.29	83.2	3.61	22.0	2.87
February	1.89	3.16	5.82	5.25	83.3	3.61	22.7	3.07
March	1.95	3.17	5.93	5.36	81.8	3.52	22.3	2.73
April	2.08	3.22	6.27	5.34	79.5	3.42	20.5	2.68
May	2.01	3.18	6.84	5.40	74.6	3.14	18.7	2.52
June	2.08	3.41	7.83	5.43	70.0	3.13	16.7	2.59
July	2.25	3.49	8.64	5.46	67.8	3.17	18.6	2.69
August	2.10	3.46	8.73	5.56	66.3	3.05	17.4	2.57
September	1.85	3.05	7.99	5.46	67.1	2.77	16.9	2.24
October	1.94	2.94	7.05	5.33	69.1	2.89	17.2	2.37
November	2.50	3.46	6.37	5.40	75.7	3.57	18.5	3.04
December	3.26	4.18	6.47	5.78	78.1	4.20	20.0	3.98
Annual Average	2.17	3.34	6.34	5.40	77.6	3.42	19.4	2.69
1997								
January	^E 3.42	4.27	^R 6.74	^R 6.15	^R 77.5	^R 4.62	^R 19.4	4.08
February	^E 2.44	3.78	^R 6.80	^R 6.10	^R 76.9	4.20	17.7	3.18
March	^E 1.61	3.06	^R 6.53	^R 5.72	^R 72.9	3.36	^R 17.4	2.39
April	^E 1.64	2.94	^R 6.57	^R 5.46	^R 70.9	^R 2.99	16.9	2.34
May	^E 1.87	3.16	^R 6.83	^R 5.36	63.8	2.92	16.6	2.51
June	^E 2.01	3.44	^R 8.21	^R 5.56	60.3	^R 3.07	^R 16.0	2.59
July	^E 1.91	3.61	^R 8.55	^R 5.28	^R 58.7	^R 2.86	^R 14.8	2.49
August	^E 1.95	3.45	^R 8.81	^R 5.32	56.6	2.92	13.8	2.58
September	^E 2.22	3.60	^R 8.65	^R 5.54	^R 58.1	3.21	13.8	2.99
October	^E 2.70	3.93	^R 7.60	^R 5.94	^R 60.6	3.66	15.2	3.30
November	^E 2.77	3.86	^R 6.85	^R 5.84	^R 67.5	4.07	16.1	3.48
December	^E 2.17	3.48	^R 6.56	^R 5.69	^R 72.1	3.78	15.1	2.85
Annual Average	^E 2.23	3.61	^R 6.93	^R 5.77	^R 69.4	^R 3.53	^R 16.1	2.81
1998								
January	^E 1.79	3.28	6.42	5.56	^R 72.4	^R 3.66	15.6	2.64
February	^E 1.64	3.09	6.40	5.56	68.7	3.60	16.0	NA
1998 YTD^c	^E 1.72	3.19	6.41	5.56	70.7	3.63	15.8	2.64
1997 YTD	^E 2.93	4.05	6.76	6.13	77.3	4.43	18.6	4.08
1996 YTD	1.97	3.15	5.72	5.27	83.2	3.61	22.3	2.87

^a See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly (NGM)* for discussion of wellhead prices.

^b Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 24 for breakdown by State.

^c Year-to-date price represents months for which price information is available in the current year.

^R = Revised Data.

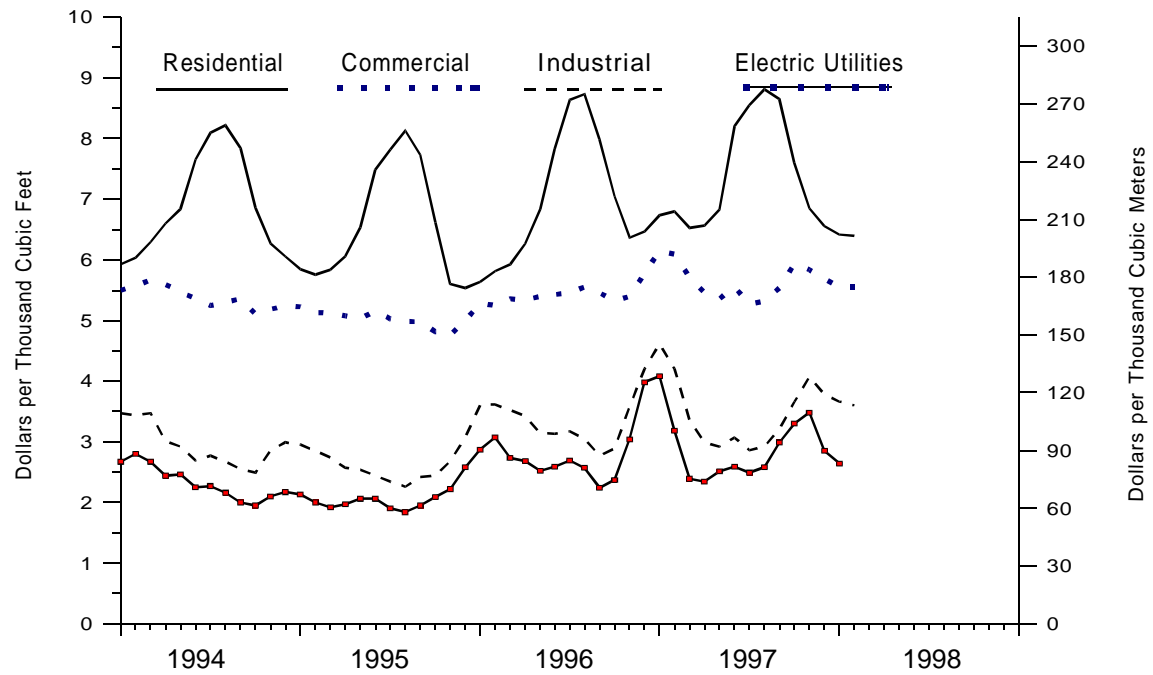
^E = Estimated Data.

NA = Not Available.

Notes: Data for 1991 through 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

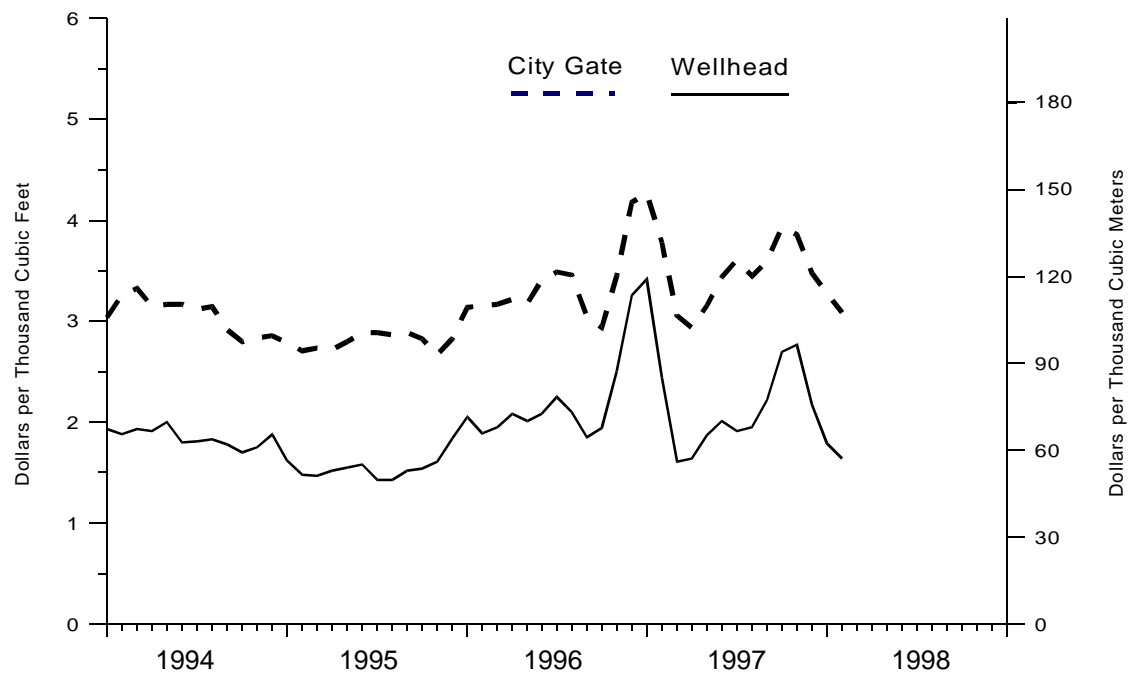
Sources: 1990-1996: Energy Information Administration (EIA) *Natural Gas Annual 1996*. 1997 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1997 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the United States, 1994-1998



Source: Table 4.

Figure 4. Average Price of Natural Gas in the United States, 1994-1998



Source: Table 4.

Table 5. U.S. Natural Gas Imports, by Country, 1992-1998

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Algeria		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	2,094,387	1.84	—	—	43,116	2.54	—	—	2,137,504	1.85
1993 Total	2,266,751	2.02	1,678	1.94	81,685	2.20	—	—	2,350,115	2.03
1994 Total	2,566,049	1.86	7,013	1.99	50,778	2.28	—	—	2,623,839	1.87
1995 Total	2,816,408	1.48	6,722	1.53	17,918	2.30	—	—	2,841,048	1.49
1996										
January	259,656	2.08	1,499	2.03	2,460	2.81	—	—	263,615	2.09
February	230,546	1.94	698	2.14	2,512	2.79	—	—	233,756	1.95
March	237,668	1.91	1,259	2.34	2,599	3.06	—	—	241,526	1.92
April	230,928	1.86	1,369	2.18	4,559	2.43	—	—	236,857	1.87
May	245,522	1.70	4,024	2.14	2,612	2.58	—	—	252,158	1.72
June	225,875	1.70	711	2.35	0	—	—	—	226,587	1.70
July	232,908	1.82	1,313	2.58	2,642	3.00	—	—	236,864	1.84
August	235,199	1.80	30	1.70	2,629	2.56	—	—	237,858	1.80
September	234,206	1.60	770	1.69	0	—	^a 2,524	3.34	237,500	1.62
October	241,294	1.68	1,110	2.37	5,116	2.96	—	—	247,520	1.71
November	245,795	2.25	982	2.85	5,031	2.59	—	—	251,807	2.26
December	263,681	3.00	96	3.30	5,164	2.51	^a 2,425	3.57	271,366	3.00
Total	2,883,277	1.96	13,862	2.25	35,325	2.70	4,949	3.45	2,937,413	1.97
1997										
January	264,919	2.93	1,375	3.08	7,560	2.78	^a 2,417	3.68	276,271	2.93
February	233,569	2.49	2,248	2.44	7,667	3.00	—	—	243,484	2.51
March	254,416	2.10	2,737	1.84	2,530	2.98	—	—	259,683	2.11
April	232,114	1.72	189	1.92	2,557	2.23	—	—	234,860	1.72
May	232,065	1.82	2,382	2.03	2,552	2.20	^b 2,455	2.59	239,455	1.83
June	228,505	1.82	1,694	2.21	5,059	2.48	—	—	235,258	1.83
July	225,528	1.86	1,088	1.98	5,026	2.48	—	—	231,642	1.87
August	241,036	1.86	6	2.35	7,535	2.43	—	—	248,578	1.88
September	237,347	1.93	29	2.47	5,030	2.41	^b 2,337	2.88	244,743	1.95
October	240,450	2.32	965	2.92	5,050	2.70	—	—	246,466	2.33
November	253,196	2.56	1,781	2.82	7,542	2.89	^b 4,893	3.07	267,412	2.58
December	253,134	2.32	1,810	2.12	7,567	2.88	—	—	262,511	2.33
Total	2,896,280	2.16	16,304	2.31	65,675	2.67	12,103	3.06	2,990,363	2.17
1998										
January	^R 273,189	NA	^E 1,519	NA	10,105	NA	^b 1,145	NA	^{RE} 285,958	NA
February	^E 230,009	NA	^E 1,519	NA	7,607	NA	—	—	^E 239,135	NA
March	^E 266,077	NA	^E 1,519	NA	5,166	NA	—	—	^E 272,762	NA
1998 YTD	^E 769,275	NA	^E 4,557	NA	22,879	NA	1,145	NA	^E 797,856	NA
1997 YTD	752,904	2.51	6,360	2.32	17,757	2.90	2,417	3.68	779,438	2.53
1996 YTD	727,870	1.98	3,456	2.17	7,572	2.89	0	—	738,897	1.99

^a Received from the United Arab Emirates.

^b Received from Australia.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

— = Not Applicable.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1992-1998
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG		Total	
	Canada		Mexico		Japan		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	67,777	1.83	95,973	1.90	52,532	3.43	216,282	2.25
1993 Total	44,518	2.14	39,676	2.02	55,989	3.34	140,183	2.59
1994 Total	52,556	2.42	46,500	1.68	62,682	3.18	161,738	2.50
1995 Total	27,554	1.96	61,283	1.50	65,283	3.41	154,119	2.39
1996								
January	7,044	3.13	1,607	1.98	5,534	3.38	14,186	3.10
February	5,207	2.71	2,000	1.82	5,621	3.35	12,828	2.85
March	6,616	2.79	2,860	1.81	5,642	3.55	15,118	2.88
April	2,430	2.21	1,924	1.69	5,654	3.57	10,008	2.88
May	2,809	2.15	1,899	1.84	3,750	3.61	8,458	2.73
June	3,001	2.25	3,486	2.16	5,651	3.65	12,138	2.87
July	3,777	2.45	3,062	2.24	7,546	3.66	14,385	3.04
August	2,197	2.30	9,176	2.11	5,663	3.67	17,036	2.65
September	2,514	1.94	2,389	1.73	5,663	3.73	10,566	2.85
October	4,311	1.97	1,990	1.85	5,589	3.84	11,889	2.83
November	6,776	2.77	1,533	2.56	5,670	4.01	13,979	3.25
December	5,222	3.67	1,914	3.72	5,665	3.73	12,801	3.70
Total	51,905	2.67	33,840	2.11	67,648	3.65	153,393	2.97
1997								
January	4,193	4.08	2,220	4.07	5,604	4.25	12,017	4.16
February	5,169	3.02	1,666	2.32	5,596	4.29	12,431	3.50
March	9,117	2.06	1,493	1.55	5,675	4.22	16,285	2.76
April	5,167	1.78	3,046	1.83	5,660	4.06	13,873	2.72
May	4,108	2.09	2,177	1.96	3,812	3.98	10,097	2.77
June	3,162	2.28	2,579	2.14	3,786	4.22	9,527	3.01
July	3,257	2.14	3,122	2.17	3,756	3.66	10,135	2.71
August	3,820	2.16	6,282	2.37	7,532	3.62	17,634	2.85
September	3,128	2.37	6,070	2.60	3,767	3.72	12,965	2.87
October	2,450	2.85	4,182	2.87	5,675	3.58	12,307	3.19
November	5,597	3.10	1,782	3.15	5,691	3.66	13,070	3.35
December	7,318	2.58	3,650	2.29	5,631	3.58	16,599	2.86
Total	56,486	2.52	38,269	2.46	62,187	3.90	156,942	3.05
1998								
January	^E 5,122	NA	^E 3,205	NA	7,446	NA	^E 15,773	NA
February	^E 4,726	NA	^E 2,912	NA	3,726	NA	^E 11,364	NA
March	^E 5,122	NA	^E 3,205	NA	7,435	NA	^E 15,762	NA
1998 YTD	^E 14,970	NA	^E 9,322	NA	18,607	NA	^E 42,899	NA
1997 YTD	18,479	2.79	5,379	2.83	16,876	4.25	40,734	3.40
1996 YTD	18,867	2.89	6,467	1.86	16,798	3.43	42,132	2.94

^E = Estimated Data.

NA = Not Available.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet)

Year and Month	Alabama ^b	Alaska	Arizona	California	Colorado	Florida	Kansas
1992 Total	355,099	443,597	771	365,632	323,041	6,657	658,007
1993 Total	388,024	430,350	597	315,851	400,985	7,085	686,347
1994 Total	515,272	555,402	752	309,427	453,207	7,486	712,730
1995 Total	519,661	469,550	558	279,555	523,084	6,463	721,436
1996							
January	45,653	44,655	41	20,714	48,619	518	62,976
February	42,668	40,433	42	22,910	45,504	493	62,683
March	45,334	43,738	45	24,686	47,843	460	63,027
April	43,868	39,694	36	23,988	45,293	456	60,858
May	45,160	36,348	39	24,091	46,893	483	62,194
June	43,319	37,334	45	23,281	45,212	503	56,318
July	43,257	37,272	30	24,495	45,570	500	57,095
August	43,873	37,239	43	24,547	51,269	540	55,144
September	42,834	38,039	31	23,826	45,437	537	55,563
October	42,200	41,204	34	24,261	50,245	468	57,589
November	45,395	40,706	37	24,493	49,824	517	58,460
December	47,278	44,166	40	25,203	50,363	531	60,890
Total	530,841	480,828	463	286,494	572,071	6,006	712,796
1997							
January	32,136	45,409	46	24,427	47,843	525	60,197
February	29,307	40,017	41	23,877	47,967	510	54,234
March	32,291	43,559	42	23,879	52,372	607	60,099
April	32,077	39,267	39	23,223	48,571	552	57,085
May	31,326	35,821	36	23,690	48,444	538	61,661
June	30,137	37,634	28	23,507	44,744	448	57,731
July	31,331	35,680	31	23,981	50,319	512	58,234
August	30,914	36,425	30	23,831	52,235	503	53,374
September	33,496	34,854	29	23,792	50,425	517	49,658
October	34,689	39,929	34	24,490	51,450	450	53,815
November	33,848	41,052	57	27,505	45,507	437	^R 54,152
December	^R 33,386	44,965	39	24,896	^R 55,769	489	^{RE} 58,413
Total	^R 384,937	474,612	451	291,098	^R 595,647	6,087	^{RE} 678,654
1998							
January	32,739	43,715	43	24,810	53,025	479	^E 55,907

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet) — Continued

Year and Month	Louisiana ^b	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1992 Total	4,914,300	194,815	91,697	53,867	1,268,863	54,883	2,017,356
1993 Total	4,991,138	204,635	80,695	54,528	1,409,429	59,851	2,049,942
1994 Total	5,169,705	222,657	63,448	50,416	1,557,689	57,805	1,934,864
1995 Total	5,108,366	238,203	95,533	50,264	1,625,837	49,468	1,811,734
1996							
January	437,274	21,912	8,089	4,503	135,594	4,276	143,693
February	412,611	18,686	7,386	4,266	126,370	3,880	139,115
March	446,371	11,208	8,385	4,443	138,091	4,164	131,701
April	436,014	32,072	8,225	4,098	132,572	4,122	147,949
May	451,148	18,021	9,026	4,244	138,946	4,273	149,425
June	434,668	23,572	8,983	3,496	131,778	3,990	143,675
July	449,052	27,119	9,335	3,603	125,193	4,047	146,451
August	449,461	23,261	9,193	4,050	126,967	4,096	148,463
September	431,768	20,208	8,641	4,172	122,040	4,185	143,302
October	421,252	20,374	8,996	4,668	123,570	4,246	150,322
November	427,566	16,081	8,487	4,521	124,377	4,216	146,828
December	443,563	13,227	8,518	4,933	128,590	4,178	143,965
Total	5,240,747	245,740	103,263	50,996	1,554,087	49,674	1,734,887
1997							
January	^E 466,044	35,849	8,089	4,638	125,382	4,035	144,608
February	^E 425,451	17,314	7,807	4,380	125,445	3,921	134,742
March	^E 470,994	25,435	8,470	4,608	124,026	4,313	146,588
April	^E 458,943	13,281	8,120	4,320	123,657	4,176	136,080
May	^E 469,736	40,848	8,611	4,166	122,869	4,542	141,818
June	^E 453,645	19,934	8,893	3,792	123,509	4,341	137,044
July	^E 468,677	41,068	8,636	4,080	123,507	4,420	143,141
August	^E 469,613	19,081	9,626	4,172	123,966	4,454	146,381
September	449,866	^E 19,546	9,162	^E 4,348	124,586	4,276	141,645
October	438,579	20,966	10,084	^E 4,959	124,710	4,507	148,583
November	443,300	26,661	9,683	^E 4,994	^E 125,632	4,434	146,638
December	460,418	30,610	9,955	^E 5,260	^E 129,777	4,634	145,859
Total	^E 5,475,266	^E 310,591	107,137	^E 53,718	^E 1,497,069	52,053	1,713,127
1998							
January	463,097	^E 34,129	9,639	^E 5,173	^E 124,359	4,623	145,522

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998

(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas ^c	Utah	Wyoming	Other ^a States	U.S. Total
1992 Total	2,580	6,145,862	171,293	842,576	800,913	18,711,808
1993 Total	4,003	6,249,624	225,401	634,957	788,472	18,981,915
1994 Total	3,221	6,353,844	270,858	696,018	774,724	19,709,525
1995 Total	1,923	6,330,048	241,290	673,775	759,728	19,506,474
1996						
January	120	545,658	19,998	58,691	69,638	1,672,623
February	75	512,557	18,027	56,037	66,726	1,580,472
March	105	552,700	21,650	57,270	72,373	1,673,596
April	121	529,015	20,864	54,662	65,643	1,649,552
May	140	547,843	21,035	52,805	67,061	1,679,176
June	132	533,168	20,759	59,346	64,752	1,634,329
July	146	557,986	20,573	55,519	64,500	1,671,743
August	117	550,499	21,137	54,567	66,523	1,670,989
September	132	529,524	21,589	51,949	65,361	1,609,140
October	133	543,264	22,152	53,649	69,163	1,637,792
November	113	517,147	21,606	53,990	70,997	1,615,362
December	102	529,659	21,376	57,551	71,875	1,656,019
Total	1,439	6,449,022	250,767	666,036	814,612	19,750,793
1997						
January	105	560,683	21,782	53,272	^E 69,157	^E 1,704,228
February	98	509,089	19,115	45,143	^E 64,219	^E 1,552,675
March	101	560,042	21,912	62,872	^E 68,518	^E 1,710,728
April	102	531,761	19,570	60,661	^E 64,329	^E 1,625,816
May	102	549,243	22,053	62,147	^E 64,899	^E 1,692,549
June	97	527,306	19,815	55,384	^E 64,227	^E 1,612,216
July	98	533,930	21,711	60,873	^E 64,033	^E 1,674,262
August	99	539,321	21,024	^E 62,134	^E 65,381	^E 1,662,565
September	86	520,843	22,007	60,378	^E 63,629	^E 1,613,144
October	97	535,219	23,006	66,373	^E 67,561	^E 1,649,501
November	91	521,531	22,840	63,949	^E 67,586	^{RE} 1,639,897
December	96	542,516	^R 22,307	^E 66,746	^E 72,224	^{RE} 1,708,357
Total	1,173	6,431,484	^R 257,139	^E 719,932	^E 795,764	^{RE} 19,845,939
1998						
January	90	542,462	^E 21,818	66,074	^E 70,408	^E 1,698,112

^a Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1997 monthly values for these States are estimated.

^b All data for 1991 through 1996 include Federal Offshore production. For 1997 and 1998, data for Alabama exclude Federal Offshore production and data for Louisiana include both the Louisiana and Alabama portions of Federal Offshore production.

^c Federal offshore production volumes are included.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

Notes: Data for 1991 through 1996 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1991-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*. 1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

**Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State,
January 1998**
(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydro- carbon Gases Removed ^a	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	35,604	784	36,388	1,195	2,317	137	32,739
Alaska	17,030	289,711	306,740	262,481	0	545	43,715
Arizona	41	1	43	0	0	0	43
California	6,501	27,819	34,320	9,271	161	78	24,810
Colorado	46,969	6,742	53,711	594	0	92	53,025
Florida	0	541	541	0	62	0	479
Kansas	^E 51,233	^E 4,825	^E 56,058	^E 95	0	^E 56	^E 55,907
Louisiana	407,522	61,262	468,785	3,677	0	2,011	463,097
Michigan	^E 27,777	^E 6,944	^E 34,721	^E 245	0	^E 347	^E 34,129
Mississippi	10,910	634	11,544	921	734	250	9,639
Montana	^E 4,593	^E 625	^E 5,218	^E 6	0	^E 39	^E 5,173
New Mexico	^E 117,386	^E 20,348	^E 137,735	^E 839	^E 12,314	^E 223	^E 124,359
North Dakota	1,467	3,464	4,931	0	5	304	4,623
Oklahoma	132,435	13,087	145,522	0	0	0	145,522
Oregon	105	0	105	3	13	0	90
Texas	480,980	116,383	597,363	38,658	13,729	2,513	542,462
Utah	^E 19,224	^E 3,916	^E 23,140	^E 61	0	^E 1,261	^E 21,818
Wyoming	101,444	5,761	107,205	12,989	14,062	14,080	66,074
Other States	^E 66,538	^E 4,817	^E 71,354	^E 205	0	^E 742	^E 70,408
Total	^E 1,527,760	^E 567,665	^E 2,095,425	^E 331,238	^E 43,395	^E 22,679	^E 1,698,112

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

^E = Estimated Data.

Notes: All monthly data are considered preliminary until publication of the *Natural Gas Annual* for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Source: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1992-1998
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^b	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^c
1992 Total^a	4,044	2,597	6,641	-227	-8.0	2,555	2,724	168
1993 Total^a	4,327	2,322	6,649	-275	-10.6	2,760	2,717	-43
1994 Total^a	4,360	2,606	6,966	284	12.2	2,796	2,508	-288
1995 Total^a	4,349	2,153	6,503	-453	3.1	2,566	2,974	408
1996								
January	4,354	1,462	5,817	-583	-28.5	49	749	700
February	4,349	1,021	5,369	-521	-33.8	97	544	447
March	4,290	758	5,048	-574	-43.1	80	403	323
April	4,312	854	5,166	-525	-38.1	227	112	-115
May	4,332	1,161	5,493	-507	-30.4	373	45	-328
June	4,341	1,529	5,870	-485	-24.1	410	35	-375
July	4,336	1,898	6,234	-404	-17.5	418	49	-370
August	4,332	2,245	6,577	-250	-10.0	400	54	-346
September	4,338	2,605	6,943	-197	-7.0	398	32	-366
October	4,335	2,810	7,145	-186	-6.2	276	73	-203
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
Total	—	—	—	—	—	2,906	2,911	6
1997								
January	4,348	1,496	5,844	34	2.3	69	752	684
February	4,342	1,140	5,482	120	11.7	55	413	358
March	4,346	991	5,337	233	30.7	131	285	155
April	4,342	1,051	5,393	197	23.1	205	146	-58
May	4,343	1,362	5,705	201	17.3	362	41	-321
June	4,357	1,730	6,087	201	13.2	405	41	-364
July	4,356	2,014	6,369	116	6.1	359	78	-281
August	4,357	2,336	6,693	92	4.1	378	56	-322
September	4,360	2,672	7,032	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	295	84	-211
November	4,360	2,698	7,058	149	5.9	113	302	189
December	4,350	2,170	6,520	-2	-0.1	45	579	533
Total	—	—	—	—	—	2,796	2,823	27
1998								
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
April(STIFS)	^{RE} 4,339	^{RE} 1,455	^{RE} 5,794	^{RE} 404	^{RE} 38.4	^{NA}	^{NA}	^{RE} -272
May(STIFS)	^E 4,339	^E 1,806	^E 6,145	^E 444	^E 32.6	^{NA}	^{NA}	^E -350

^a Total as of December 31.

^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; 1995 - 7,927; and 1996 - 8,159.

^c Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

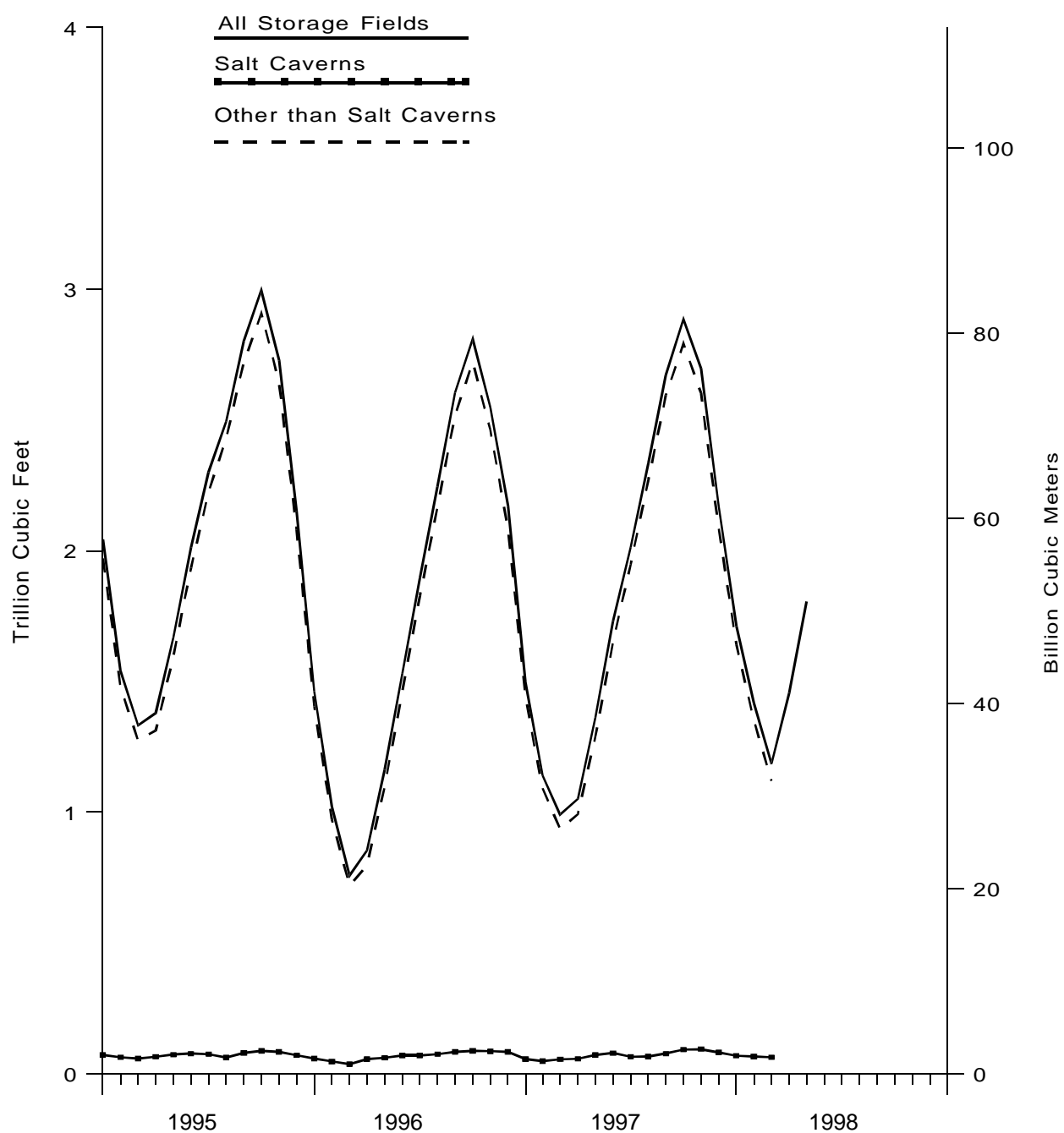
^{NA} = Not Available.

— = Not Applicable.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. In January 1995, 2 billion cubic feet was added to base gas for two new respondents. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Working Gas in Underground Natural Gas Storage in the United States, 1995-1998



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - by Season, 1995-1998
(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^a
October 1995	4,338	2,996	7,334	--	--	--	--	--
1995-96 Heating Season								
November	4,342	2,728	7,070	-249	-8.4	96	367	272
December	4,349	2,153	6,503	-453	-17.4	53	635	582
January	4,354	1,462	5,817	-583	-28.5	49	749	700
February	4,349	1,021	5,369	-521	-33.8	97	544	447
March	4,290	758	5,048	-574	-43.1	80	403	323
Total	--	--	--	--	--	375	2,698	2,323
1996 Refill Season								
April	4,312	854	5,166	-525	-38.1	227	112	-115
May	4,332	1,161	5,493	-507	-30.4	373	45	-328
June	4,341	1,529	5,870	-485	-24.1	410	35	-375
July	4,336	1,898	6,234	-404	-17.5	418	49	-370
August	4,332	2,245	6,577	-250	-10.0	400	54	-346
September	4,338	2,605	6,943	-197	-7.0	398	32	-366
October	4,335	2,810	7,145	-186	-6.2	276	73	-203
Total	--	--	--	--	--	2,502	401	-2,102
1996-97 Heating Season								
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
January	4,348	1,496	5,844	34	2.3	69	752	684
February	4,342	1,140	5,482	120	11.7	55	413	358
March	4,346	991	5,337	233	30.7	131	285	155
Total	--	--	--	--	--	431	2,266	1,835
1997 Refill Season								
April	4,342	1,051	5,393	197	23.1	205	146	-58
May	4,343	1,362	5,705	201	17.3	362	41	-321
June	4,357	1,730	6,087	201	13.2	405	41	-364
July	4,356	2,014	6,369	116	6.1	359	78	-281
August	4,357	2,336	6,693	92	4.1	378	56	-322
September	4,360	2,672	7,032	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	295	84	-211
Total	--	--	--	--	--	2,384	491	-1,893
1997-98 Heating Season								
November	4,360	2,698	7,058	149	5.9	113	302	189
December	4,350	2,170	6,520	-2	-0.1	45	579	533
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
Total	--	--	--	--	--	^R 436	^R 2,166	^R 1,730
1998 Refill Season								
<i>April(STIFS)</i>	^{RE} 4,339	^{RE} 1,455	^{RE} 5,794	^{RE} 404	^{RE} 38.4	NA	NA	^{RE} -272
<i>May(STIFS)</i>	^E 4,339	^E 1,806	^E 6,145	^E 444	^E 32.6	NA	NA	^E -350

^a Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. In January 1995, 2 billion cubic feet was added to base gas for two new respondents. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1996-1998
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^a	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	63	59	122	-14	-19.3	23	41	17
February	63	48	111	-17	-26.2	23	33	10
March	63	38	101	-21	-35.2	21	32	11
April	63	57	120	-9	-13.7	30	10	-20
May	63	62	126	-11	-15.1	19	13	-6
June	63	71	135	-7	-8.9	21	12	-9
July	60	71	131	-5	-6.7	20	14	-6
August	60	76	136	13	20.5	21	16	-5
September	60	85	145	4	5.0	23	13	-9
October	60	88	148	0	0.4	17	14	-3
November	64	87	151	3	4.0	16	20	5
December	64	85	149	14	18.8	25	28	2
Total	—	—	—	—	—	258	246	-13
1997								
January	65	57	122	-2	-3.1	21	50	30
February	59	49	109	2	4.0	15	23	8
March	65	56	121	18	47.3	22	16	-6
April	65	58	123	1	1.8	21	19	-3
May	65	73	138	11	17.3	27	13	-14
June	66	80	145	8	11.7	22	15	-7
July	65	66	131	-5	-7.5	15	29	14
August	65	67	132	-9	-12.4	23	22	-1
September	65	78	143	-7	-8.7	26	14	-12
October	66	93	159	5	5.6	30	14	-16
November	67	95	162	8	9.1	25	23	-2
December	67	82	150	-3	-3.1	18	31	12
Total	—	—	—	—	—	266	270	4
1998								
January	66	70	136	13	22.4	17	31	14
February	65	67	132	18	35.9	17	21	3
March	68	64	132	8	14.4	23	28	6

^a Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1995 - 5,314; and 1996 - 7,952.

— = Not Applicable.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1996-1998

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^a	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	4,291	1,404	5,695	-569	-28.8	26	708	682
February	4,286	973	5,259	-504	-34.1	73	510	437
March	4,228	720	4,948	-553	-43.4	59	371	312
April	4,249	797	5,046	-516	-39.3	197	102	-95
May	4,268	1,099	5,367	-496	-31.1	354	32	-322
June	4,277	1,458	5,735	-478	-24.7	390	23	-366
July	4,276	1,827	6,103	-399	-17.9	398	34	-363
August	4,272	2,169	6,441	-263	-10.8	380	39	-341
September	4,277	2,520	6,797	-201	-7.4	376	19	-357
October	4,275	2,722	6,997	-186	-6.4	259	59	-200
November	4,275	2,462	6,737	-183	-6.9	75	333	259
December	4,277	2,087	6,364	6	0.3	61	433	372
Total	—	—	—	—	—	2,647	2,665	18
1997								
January	4,283	1,439	5,722	36	2.5	48	702	654
February	4,283	1,091	5,374	118	12.1	40	390	350
March	4,281	935	5,216	215	29.9	109	270	161
April	4,277	993	5,270	196	24.6	184	128	-56
May	4,278	1,289	5,567	190	17.3	335	28	-307
June	4,291	1,651	5,942	193	13.2	383	26	-357
July	4,290	1,948	6,238	121	6.6	344	49	-295
August	4,291	2,270	6,561	101	4.7	355	34	-321
September	4,295	2,595	6,890	75	3.0	354	30	-324
October	4,292	2,793	7,085	70	2.6	265	70	-195
November	4,293	2,603	6,897	141	5.7	88	279	191
December	4,283	2,088	6,371	0	0.0	27	548	521
Total	—	—	—	—	—	2,530	2,553	23
1998								
January	4,278	1,641	5,920	202	14.0	51	504	453
February	4,273	1,351	5,624	260	23.9	56	352	296
March	4,271	1,120	5,391	185	19.8	113	349	236

^a Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1995 - 5,314; and 1996 - 7,952.

— = Not Applicable.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet)

State	1998			1997			
	March	February	January	Total	December	November	October
Alabama	248	187	396	-162	243	243	-251
Arkansas	1,039	875	1,057	251	1,526	651	271
California	-2,257	26,766	29,805	14,425	58,445	2,749	-11,834
Colorado	3,928	6,337	3,510	384	5,111	2,545	458
Illinois	28,186	36,082	58,036	-11,140	45,338	2,735	-28,914
Indiana	4,249	3,322	4,144	365	4,036	-925	-3,135
Iowa	6,692	5,335	18,905	-6,207	16,932	554	-8,358
Kansas	14,438	8,180	15,103	-12,416	12,485	8,499	-7,912
Kentucky	7,768	9,981	9,559	3,182	10,772	4,043	-2,925
Louisiana	7,400	5,164	21,574	-7,721	43,862	21,196	-23,999
Maryland	1,631	2,745	3,236	-148	1,312	53	-2,283
Michigan	55,388	45,886	84,170	-702	77,495	53,120	-32,347
Minnesota	416	203	444	-303	5	4	0
Mississippi	2,405	4,251	7,431	3,703	8,471	1,122	-2,145
Missouri	423	10	458	-453	228	-207	-215
Montana	3,017	2,554	4,421	11,955	3,168	2,753	1,015
Nebraska	1,090	355	376	-1,545	944	126	-66
New Mexico	658	-130	-412	2,065	2,500	25	-1,305
New York	7,977	9,548	11,582	-131	10,285	4,803	-2,343
Ohio	28,619	34,023	34,810	-6,964	40,390	15,498	-8,799
Oklahoma	7,159	737	21,199	-10,892	24,727	13,548	-19,571
Oregon	934	1,253	540	-1,019	1,036	-250	-93
Pennsylvania	38,957	49,786	57,788	28,252	53,756	25,976	-16,030
Texas	-9,062	-3,341	35,935	11,896	54,705	19,105	-30,561
Utah	1,199	6,783	7,613	-7,571	13,169	2,721	-1,301
Washington	3,329	4,131	-58	-904	3,177	90	707
West Virginia	22,818	36,285	30,647	17,744	36,345	6,670	-8,103
Wyoming	2,611	2,059	3,990	963	3,015	1,918	-577
AGA Regions							
Producing	24,038	15,735	101,887	-13,114	148,276	64,145	-85,222
Eastern Consuming	204,045	233,545	314,105	22,091	298,078	112,688	-113,768
Western Consuming	13,177	50,086	50,266	17,929	87,127	12,530	-11,625
Total	241,260	299,366	466,258	26,906	533,481	189,363	-210,615

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998

(Volumes in Million Cubic Feet) — Continued

State	1997						
	September	August	July	June	May	April	March
Alabama	-262	-286	-43	-93	-271	-130	-25
Arkansas	-1,048	-1,234	-1,472	-1,340	-608	178	342
California	-6,817	-8,032	-11,406	-23,191	-24,048	-19,220	-441
Colorado	-5,141	-4,488	-5,540	-5,257	-5,328	5,569	2,069
Illinois	-36,161	-35,848	-32,648	-28,038	-23,880	-546	23,189
Indiana	-4,603	-3,757	-3,309	-1,914	-110	1,444	2,498
Iowa	-12,762	-10,938	-8,777	-8,361	-3,473	1,627	2,953
Kansas	-13,678	-11,439	-3,703	-12,195	-9,699	-1,605	4,096
Kentucky	-7,983	-6,520	-7,391	-8,991	-7,821	-343	4,166
Louisiana	-29,222	-15,259	-11,713	-19,702	-19,500	-3,923	-18,817
Maryland	-2,766	-2,292	-1,497	-1,657	-1,590	133	1,903
Michigan	-64,478	-72,202	-74,634	-72,604	-46,126	-13,752	53,314
Minnesota	-130	-137	-321	-312	-273	-31	188
Mississippi	-5,204	-3,115	709	-3,812	-5,552	442	-2,306
Missouri	-240	-379	-433	-112	-1,200	56	1,174
Montana	-1,490	-2,339	-2,710	-1,633	-846	1,810	2,591
Nebraska	-1,091	-964	-75	-797	-708	-43	-241
New Mexico	-853	-328	587	-534	-1,228	583	501
New York	-6,626	-11,544	-11,628	-10,571	-7,770	-1,700	9,210
Ohio	-23,418	-32,053	-34,093	-37,335	-34,081	-1,385	21,557
Oklahoma	-14,433	-8,317	-864	-8,028	-18,258	-7,130	-8,092
Oregon	-391	-1,123	-1,240	-1,602	-1,239	543	920
Pennsylvania	-48,951	-44,991	-41,099	-49,619	-44,272	-3,306	50,263
Texas	-21,242	-13,220	10,013	-20,500	-27,751	-17,395	-21,183
Utah	-3,235	-5,284	-8,117	-7,950	-4,255	-2,150	-2,620
Washington	-2,267	990	-490	-3,766	-5,880	-66	3,217
West Virginia	-18,997	-24,020	-26,065	-31,691	-23,964	1,715	23,312
Wyoming	-2,424	-2,712	-3,393	-2,290	-1,119	127	1,082
AGA Regions							
Producing	-85,680	-52,913	-6,442	-66,111	-82,596	-28,850	-45,460
Eastern Consuming	-228,337	-245,796	-241,693	-251,783	-195,265	-16,231	193,275
Western Consuming	-21,894	-23,125	-33,218	-46,001	-42,987	-13,416	7,006
Total	-335,912	-321,834	-281,353	-363,895	-320,849	-58,498	154,821

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet) — Continued

State	1997		1996				
	February	January	Total	December	November	October	September
Alabama	184	531	-1,224	761	129	-117	-440
Arkansas	1,006	1,978	64	644	562	-603	-1,153
California	19,742	38,477	51,292	14,985	-2,885	-6,393	-6,822
Colorado	4,862	5,523	-1,004	2,923	92	-87	-3,828
Illinois	39,774	63,858	-15,109	35,109	15,523	-28,103	-36,529
Indiana	2,866	7,272	-1,801	3,290	-853	-2,715	-3,911
Iowa	8,469	15,926	-1,229	18,020	5,502	-10,555	-12,536
Kansas	9,102	13,633	12,118	12,290	12,828	-6,005	-8,532
Kentucky	8,068	18,108	-7,530	8,039	4,853	-2,826	-8,590
Louisiana	21,080	48,276	10,964	32,273	29,327	-15,704	-33,463
Maryland	2,662	5,873	24	958	1,424	-1,553	-1,677
Michigan	71,108	120,403	-31,671	83,640	61,160	-49,100	-81,220
Minnesota	117	588	-30	218	30	-35	-202
Mississippi	2,924	12,169	-12,758	4,658	5,707	-3,369	-7,330
Missouri	-252	1,126	-48	76	306	-210	-204
Montana	3,983	5,651	11,725	5,512	4,760	336	-3,519
Nebraska	504	867	-1,489	1,108	479	600	-785
New Mexico	1,527	591	5,338	-823	607	482	-1,873
New York	10,116	17,636	-13,367	8,151	6,347	-2,750	-7,327
Ohio	28,120	58,636	-10,844	35,138	25,728	-13,648	-23,807
Oklahoma	7,912	27,616	22,961	20,970	17,468	-10,345	-18,814
Oregon	1,078	1,341	783	1,240	552	170	-121
Pennsylvania	52,298	94,228	-59,533	25,003	33,464	-15,621	-37,711
Texas	24,869	55,056	63,869	24,153	12,557	-22,072	-34,225
Utah	2,520	8,931	12,955	9,164	4,651	1,416	-2,204
Washington	1,798	1,587	2,067	1,746	462	1,648	-597
West Virginia	28,900	53,643	-35,844	21,644	19,884	-15,242	-28,009
Wyoming	2,976	4,361	5,056	3,529	2,903	-272	-613
AGA Regions							
Producing	68,420	159,319	102,555	94,165	79,056	-57,617	-105,390
Eastern Consuming	252,817	458,106	-179,663	240,936	173,946	-141,841	-242,746
Western Consuming	37,076	66,459	82,844	39,316	10,566	-3,217	-17,907
Total	358,313	683,884	5,735	374,417	263,567	-202,675	-366,042

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet) — Continued

State	1996					
	August	July	June	May	April	March
Alabama	-395	-205	-670	-367	-153	162
Arkansas	-615	-744	-1,166	-1,302	-44	1,259
California	15,439	7,028	-9,697	-23,523	-11,917	1,459
Colorado	-3,722	-5,347	-5,035	-2,271	1,268	5,022
Illinois	-35,172	-35,480	-32,122	-26,711	-3,200	22,829
Indiana	-6,115	-4,278	-2,398	-178	948	3,532
Iowa	-13,166	-12,393	-7,677	-1,640	1,980	6,303
Kansas	-8,265	-7,537	-12,192	-7,892	-5,779	9,984
Kentucky	-10,071	-13,358	-14,231	-6,224	380	7,911
Louisiana	-32,218	-29,380	-16,986	-11,703	-2,727	25,245
Maryland	-1,845	-1,887	-2,621	-2,154	212	1,827
Michigan	-82,649	-80,355	-78,794	-58,040	-14,063	51,828
Minnesota	-213	-287	-294	-366	-90	213
Mississippi	-7,868	-8,061	-6,662	-2,502	-4,083	6,016
Missouri	-206	-240	-261	-1,319	296	384
Montana	-3,501	-3,261	-3,577	782	647	3,884
Nebraska	-1,346	-1,193	-1,924	-1,617	-303	802
New Mexico	363	811	48	21	519	2,200
New York	-12,585	-12,964	-12,079	-13,349	-2,711	8,971
Ohio	-29,581	-36,092	-37,165	-30,055	-8,729	29,225
Oklahoma	-14,973	-8,211	-10,949	-19,131	-4,435	14,679
Oregon	-509	-1,318	-1,365	-841	132	651
Pennsylvania	-52,038	-69,480	-62,061	-46,338	-22,497	43,459
Texas	-18,108	-2,670	-13,902	-28,071	-22,764	43,870
Utah	-3,884	-6,821	-6,742	-5,533	-188	2,388
Washington	-1,965	-935	-3,317	-1,973	-356	540
West Virginia	-19,913	-32,686	-29,535	-32,767	-16,242	26,887
Wyoming	-771	-2,160	-1,760	-2,704	-644	1,095
AGA Regions						
Producing	-81,685	-55,791	-61,809	-70,578	-39,312	103,253
Eastern Consuming	-265,082	-300,612	-281,537	-220,759	-64,083	204,119
Western Consuming	874	-13,101	-31,788	-36,431	-11,149	15,252
Total	-345,894	-369,504	-375,133	-327,768	-114,544	322,623

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1996 are final. All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

**Table 14. Activities of Underground Natural Gas Storage Operators, by State,
March 1998**
(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	337	1,527	-92	-21.4	81	329
Arkansas	31,871	11,095	2,649	13,744	1,106	71.7	130	1,170
California	469,696	247,383	71,237	318,620	-10,811	-13.2	10,654	8,397
Colorado	99,600	48,140	16,476	64,616	-1,316	-7.4	2,103	6,030
Illinois	898,239	651,403	92,702	744,105	17,624	23.5	6,822	35,009
Indiana	113,210	73,777	18,824	92,601	-980	-4.9	83	4,332
Iowa	270,200	200,700	11,163	211,863	1,504	15.6	594	7,285
Kansas	298,666	190,410	36,036	226,447	1,400	4.0	6,168	20,606
Kentucky	219,908	109,091	54,288	163,379	-374	-0.7	2,325	10,093
Louisiana	559,473	266,337	113,027	379,364	29,590	35.5	20,969	28,369
Maryland	62,000	46,677	5,465	52,142	2,975	119.5	668	2,299
Michigan	1,052,236	420,700	257,021	677,721	74,632	40.9	10,752	66,140
Minnesota	7,000	4,623	1,309	5,932	132	11.2	0	416
Mississippi	134,012	77,678	28,038	105,716	-4,301	-13.3	5,883	8,289
Missouri	31,126	21,600	8,555	30,155	1,610	23.2	471	894
Montana	375,010	167,374	36,076	203,450	-9,715	-21.2	401	3,418
Nebraska	39,469	31,507	1,673	33,180	854	104.3	234	1,324
New Mexico	96,600	24,170	5,922	30,092	1,647	38.5	445	1,103
New York	173,979	102,980	29,367	132,346	8,753	42.5	1,931	9,908
Ohio	557,452	352,503	29,708	382,211	14,301	92.8	3,875	32,494
Oklahoma	395,087	233,763	49,822	283,585	6,541	15.1	10,428	17,587
Oregon	11,623	4,896	3,259	8,155	1,630	100.1	0	934
Pennsylvania	680,006	354,901	130,748	485,649	24,404	22.9	13,830	52,786
Texas	678,534	254,942	127,291	382,233	29,439	30.1	28,809	19,747
Utah	121,980	62,100	8,245	70,345	-696	-7.8	2,075	3,274
Washington	37,300	22,096	3,282	25,379	76	2.4	295	3,624
West Virginia	484,597	296,399	30,296	326,694	2,808	10.2	5,955	28,773
Wyoming	105,869	60,729	11,014	71,742	94	0.9	11	2,621
AGA Regions								
Producing	2,194,242	1,058,395	362,785	1,421,180	65,423	22.0	72,832	96,871
Eastern Consuming	4,585,702	2,663,428	670,146	3,333,575	148,018	28.3	47,621	251,666
Western Consuming	1,228,076	617,342	150,898	768,240	-20,607	-12.0	15,539	28,715
Total	8,008,021	4,339,165	1,183,829	5,522,994	192,834	19.5	135,992	377,251

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997
				February	January	Total
Alabama	18,911	18,387	22,115	9,222	9,689	48,328
Alaska	2,264	4,020	4,473	25	2,240	15,284
Arizona	12,707	11,070	9,664	5,604	7,103	31,162
Arkansas	12,004	16,039	17,721	6,668	5,336	42,472
California	158,512	141,791	124,786	76,210	82,302	486,233
Colorado	NA	NA	35,077	17,178	NA	NA
Connecticut	11,848	12,793	15,306	5,585	6,263	NA
Delaware	2,768	3,160	3,619	1,360	1,408	8,920
District of Columbia	4,774	5,363	6,386	2,365	2,409	15,698
Florida	5,373	4,235	5,398	2,550	2,823	14,538
Georgia	38,197	37,574	43,690	18,031	20,167	114,282
Hawaii	108	100	100	52	55	518
Idaho	5,207	5,106	4,879	2,232	2,975	NA
Illinois	131,563	169,392	177,614	53,146	78,417	497,370
Indiana	NA	59,073	62,261	20,668	NA	NA
Iowa	23,821	29,449	30,006	10,261	13,560	81,357
Kansas	25,089	27,908	30,657	11,594	13,494	75,968
Kentucky	19,133	22,906	24,856	8,515	10,618	NA
Louisiana	17,264	18,726	22,149	7,953	9,311	NA
Maine	305	299	302	153	153	1,009
Maryland	23,660	25,767	30,222	11,052	12,609	77,109
Massachusetts	32,592	NA	37,913	15,644	16,948	NA
Michigan	105,613	124,416	132,173	48,977	56,636	379,431
Minnesota	36,626	45,705	48,095	15,023	21,603	132,392
Mississippi	NA	10,017	12,051	4,564	NA	NA
Missouri	NA	48,925	51,152	18,966	NA	NA
Montana	5,822	6,935	6,815	2,404	3,418	20,995
Nebraska	14,544	17,521	17,033	6,642	7,902	47,115
Nevada	9,175	8,295	7,008	4,149	5,025	25,154
New Hampshire	2,150	2,197	2,340	1,010	1,140	NA
New Jersey	60,113	70,438	78,293	29,313	30,800	212,726
New Mexico	12,221	12,950	11,723	4,337	7,884	36,380
New York	90,480	130,758	129,237	42,032	^R 48,448	^R 400,876
North Carolina	20,513	20,051	24,455	9,710	10,803	52,993
North Dakota	3,472	4,297	4,034	1,561	1,910	11,900
Ohio	94,438	117,722	127,863	43,910	50,527	354,654
Oklahoma	25,425	26,607	29,348	11,652	13,774	71,745
Oregon	10,698	11,166	10,633	4,581	6,117	33,055
Pennsylvania	66,241	87,280	97,608	34,714	31,526	262,306
Rhode Island	5,500	5,781	6,461	2,720	2,781	18,162
South Carolina	10,609	10,090	12,544	5,177	5,432	25,475
South Dakota	3,861	4,824	4,564	1,666	2,196	13,225
Tennessee	NA	24,881	28,597	9,546	NA	NA
Texas	67,354	75,860	82,090	30,500	36,854	211,229
Utah	16,589	18,242	17,126	8,193	8,396	58,099
Vermont	824	835	885	397	427	2,631
Virginia	22,613	24,866	28,352	11,067	11,546	73,716
Washington	NA	20,262	19,173	13,518	NA	NA
West Virginia	10,705	11,599	13,560	5,171	5,534	35,150
Wisconsin	37,706	45,488	47,968	15,618	22,087	136,335
Wyoming	NA	3,903	4,178	1,560	NA	11,816
Total	1,473,954	1,673,710	1,764,554	674,749	^R 799,205	^R 5,008,794

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	December	November	October	September	August	July
Alabama	7,914	3,963	1,435	1,250	1,238	1,392
Alaska	2,162	1,684	1,569	743	402	463
Arizona	4,780	1,980	1,057	1,127	910	1,019
Arkansas	6,375	4,018	1,346	949	918	1,028
California	69,510	40,537	24,905	21,772	20,951	26,840
Colorado	16,540	NA	NA	NA	NA	NA
Connecticut	5,901	3,625	NA	1,001	903	949
Delaware	1,206	667	250	183	178	194
District of Columbia	2,312	1,414	553	393	372	419
Florida	2,038	1,192	755	699	742	785
Georgia	19,723	16,465	6,777	3,190	2,944	3,195
Hawaii	45	42	39	40	41	43
Idaho	2,372	1,429	639	NA	294	346
Illinois	69,685	56,316	29,486	11,697	10,111	10,378
Indiana	NA	17,458	NA	3,491	2,989	2,852
Iowa	12,039	8,592	4,027	1,645	1,472	1,593
Kansas	11,319	8,812	2,419	1,629	1,616	1,862
Kentucky	11,153	8,075	NA	1,448	1,077	1,419
Louisiana	8,007	4,321	NA	1,697	1,671	1,685
Maine	142	107	66	30	26	21
Maryland	10,927	8,296	3,543	2,067	1,800	1,906
Massachusetts	15,274	10,140	4,780	2,555	2,437	2,831
Michigan	49,980	37,898	17,835	8,767	7,264	4,748
Minnesota	17,705	15,376	6,811	2,864	2,556	2,706
Mississippi	4,327	2,545	896	NA	NA	NA
Missouri	19,007	12,077	NA	2,625	2,403	2,717
Montana	3,197	2,030	1,230	508	447	411
Nebraska	5,790	4,401	1,382	936	937	1,015
Nevada	3,867	1,917	1,019	802	777	887
New Hampshire	933	616	327	NA	155	160
New Jersey	30,622	19,893	8,843	5,309	4,680	5,102
New Mexico	8,162	4,067	1,209	830	843	815
New York	^R 50,610	^R 35,378	^R 16,616	^R 9,976	^R 10,405	^R 10,440
North Carolina	9,219	4,884	1,441	935	900	1,074
North Dakota	1,471	1,178	474	229	206	228
Ohio	51,089	37,009	19,335	7,228	6,202	7,533
Oklahoma	11,053	6,181	1,966	1,548	1,519	1,679
Oregon	4,834	2,809	1,498	737	670	836
Pennsylvania	37,823	26,338	12,987	6,315	4,714	5,153
Rhode Island	2,509	1,464	659	473	443	480
South Carolina	4,634	2,399	631	466	444	512
South Dakota	1,734	1,329	569	261	233	248
Tennessee	11,064	6,385	1,905	1,187	1,080	1,119
Texas	33,619	19,418	8,261	6,416	6,101	6,829
Utah	10,374	6,017	4,299	1,957	1,466	1,501
Vermont	345	214	118	59	52	57
Virginia	11,657	7,430	3,007	1,640	1,473	1,576
Washington	NA	NA	NA	NA	NA	NA
West Virginia	5,431	3,949	1,358	784	594	488
Wisconsin	19,157	16,222	8,154	2,974	2,550	2,878
Wyoming	1,142	1,175	646	330	252	294
Total	^R 731,121	^R 499,177	^R 235,681	^R 131,678	^R 119,301	^R 130,980

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	June	May	April	March	February	January
Alabama	1,604	2,638	3,180	5,326	9,098	9,290
Alaska	508	789	1,177	1,767	1,618	2,402
Arizona	1,154	1,571	2,259	4,235	5,092	5,978
Arkansas	1,240	2,324	3,293	4,942	7,754	8,285
California	23,572	28,707	39,271	48,377	66,688	75,103
Colorado	NA	NA	8,929	NA	NA	NA
Connecticut	1,380	2,332	4,378	5,176	6,538	6,255
Delaware	318	557	942	1,265	1,612	1,549
District of Columbia	562	944	1,316	2,049	2,655	2,708
Florida	856	944	1,013	1,279	2,068	2,167
Georgia	3,357	3,834	8,221	9,001	16,024	21,550
Hawaii	41	42	41	46	49	51
Idaho	433	939	1,464	1,909	2,542	2,564
Illinois	11,617	26,081	41,192	61,416	69,338	100,053
Indiana	4,958	9,482	15,219	20,684	26,294	32,779
Iowa	2,102	3,938	6,971	9,528	11,881	17,568
Kansas	1,652	3,581	6,402	8,769	12,105	15,803
Kentucky	1,572	2,954	4,883	7,293	8,964	13,942
Louisiana	2,050	2,824	3,680	5,619	8,991	9,736
Maine	34	56	85	142	133	166
Maryland	2,677	4,215	6,913	8,998	12,080	13,687
Massachusetts	4,370	6,917	12,122	15,127	17,654	NA
Michigan	12,010	26,958	38,256	51,299	57,545	66,871
Minnesota	3,499	6,775	11,435	16,959	19,966	25,740
Mississippi	920	1,463	1,904	3,038	4,968	5,050
Missouri	3,665	6,474	11,030	15,422	23,426	25,499
Montana	631	1,143	1,996	2,468	3,038	3,897
Nebraska	1,367	3,177	4,355	6,232	7,829	9,692
Nevada	981	1,419	2,018	3,172	3,825	4,470
New Hampshire	263	465	744	913	1,136	1,061
New Jersey	6,457	11,258	18,139	31,984	34,709	35,729
New Mexico	238	1,952	1,503	3,810	5,630	7,320
New York	^R 15,312	^R 27,004	^R 41,729	^R 52,648	^R 63,646	^R 67,111
North Carolina	1,599	2,991	4,087	5,811	10,002	10,050
North Dakota	333	730	1,178	1,576	1,984	2,313
Ohio	9,785	21,575	33,023	44,153	52,497	65,225
Oklahoma	2,105	3,857	6,160	9,070	12,687	13,920
Oregon	1,029	1,920	3,206	4,350	5,308	5,857
Pennsylvania	7,583	15,446	25,130	33,537	41,287	45,992
Rhode Island	727	1,171	1,994	2,462	2,891	2,890
South Carolina	701	1,230	1,776	2,592	4,994	5,097
South Dakota	368	784	1,250	1,625	2,089	2,735
Tennessee	NA	3,019	4,797	NA	12,086	12,795
Texas	7,595	10,420	14,025	22,686	33,154	42,706
Utah	1,601	1,821	4,875	5,945	8,366	9,876
Vermont	97	189	283	383	416	419
Virginia	2,054	4,227	6,662	9,123	11,741	13,126
Washington	3,055	5,591	4,586	8,132	9,377	10,885
West Virginia	961	2,246	3,421	4,318	5,630	5,969
Wisconsin	2,965	7,456	11,112	17,378	19,323	26,165
Wyoming	395	1,076	1,058	1,544	1,660	2,243
Total	^R 160,568	^R 286,052	^R 434,687	^R 605,838	^R 766,614	^R 907,096

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1996					
	Total	December	November	October	September	August
Alabama	56,522	6,664	3,461	1,647	1,321	1,227
Alaska	16,179	2,181	1,708	1,238	589	544
Arizona	27,709	4,051	2,322	1,082	900	836
Arkansas	46,289	6,286	3,768	1,425	1,044	955
California	473,310	62,905	43,702	30,462	26,104	21,757
Colorado	110,924	15,814	9,571	4,886	2,773	2,505
Connecticut	43,764	5,842	3,522	1,840	992	954
Delaware	9,791	1,236	648	291	181	175
District of Columbia	17,290	2,406	1,252	578	401	380
Florida	16,293	1,583	972	752	690	658
Georgia	127,062	18,574	14,651	5,771	3,092	2,972
Hawaii	540	44	41	39	41	40
Idaho	14,941	2,224	1,570	646	364	277
Illinois	538,749	80,922	63,715	28,081	13,137	9,546
Indiana	179,939	26,087	18,577	7,846	3,617	3,117
Iowa	88,078	14,138	9,782	3,620	1,954	1,610
Kansas	85,376	14,388	9,447	3,163	1,973	1,640
Kentucky	70,232	10,177	9,022	3,018	1,389	1,253
Louisiana	56,626	6,173	3,511	2,102	1,836	1,831
Maine	967	120	105	67	28	23
Maryland	85,533	11,426	7,828	3,738	2,207	2,064
Massachusetts	114,365	13,947	9,943	5,012	2,677	2,463
Michigan	399,522	52,724	38,862	18,528	9,068	7,300
Minnesota	142,319	22,152	14,959	6,705	2,968	2,433
Mississippi	30,157	3,676	1,880	929	804	771
Missouri	137,225	20,539	11,687	4,321	2,749	2,448
Montana	22,175	3,286	2,458	1,267	634	431
Nebraska	48,989	7,283	4,043	2,173	1,017	932
Nevada	22,607	3,386	2,069	894	732	678
New Hampshire	7,012	855	667	312	169	155
New Jersey	222,619	29,983	18,933	9,917	5,472	4,715
New Mexico	33,689	5,663	3,689	1,330	844	836
New York	403,264	NA	NA	NA	NA	NA
North Carolina	58,812	8,607	4,461	1,701	913	862
North Dakota	12,591	1,894	1,256	554	256	209
Ohio	374,824	52,480	38,565	18,651	7,026	6,306
Oklahoma	76,629	11,298	5,722	2,267	1,679	1,515
Oregon	33,236	5,200	3,164	1,357	821	673
Pennsylvania	278,606	36,688	27,037	13,202	5,907	5,295
Rhode Island	18,839	2,350	1,416	738	467	450
South Carolina	29,406	4,336	2,168	800	476	419
South Dakota	14,085	2,243	1,414	578	316	231
Tennessee	70,423	10,177	5,949	1,987	1,190	1,101
Texas	229,318	33,952	17,793	9,479	7,495	6,534
Utah	54,344	8,203	5,749	4,215	2,540	1,416
Vermont	2,523	302	208	100	56	47
Virginia	76,214	10,946	7,388	2,879	1,414	1,424
Washington	62,689	9,804	6,207	2,930	1,572	1,250
West Virginia	37,390	5,166	3,391	1,609	696	537
Wisconsin	147,893	21,285	16,724	7,783	3,130	2,726
Wyoming	13,534	1,744	1,334	1,087	368	265
Total	5,241,414	737,722	502,981	243,121	137,556	118,296

^R = Revised Data.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997
				February	January	Total
Alabama	8,539	8,287	9,410	4,010	4,529	34,239
Alaska	4,384	5,240	6,291	1,501	2,883	23,254
Arizona	7,663	7,384	6,694	3,534	4,129	30,178
Arkansas	8,856	9,853	10,659	4,075	4,781	29,518
California	59,245	51,923	46,754	28,787	30,457	254,440
Colorado	NA	NA	20,658	8,852	NA	NA
Connecticut	11,297	11,138	11,479	5,540	5,757	NA
Delaware	1,834	2,071	2,281	899	935	^R 6,547
District of Columbia	4,924	4,651	4,089	2,382	2,542	17,034
Florida	9,041	7,987	9,003	4,457	4,583	37,644
Georgia	16,591	16,506	18,329	8,120	8,471	57,474
Hawaii	376	376	391	179	196	NA
Idaho	3,546	3,600	3,517	1,570	1,977	11,435
Illinois	52,989	67,184	69,863	22,455	30,533	205,941
Indiana	NA	28,522	29,288	10,460	NA	NA
Iowa	13,900	17,193	17,561	5,962	7,938	50,218
Kansas	13,556	15,319	16,642	6,177	7,378	NA
Kentucky	10,721	12,689	13,594	5,053	5,668	NA
Louisiana	9,509	7,553	7,848	4,998	^R 4,511	25,704
Maine	844	780	799	422	422	2,713
Maryland	13,134	13,461	14,162	6,474	6,659	53,255
Massachusetts	28,087	27,678	25,659	14,371	13,716	105,883
Michigan	49,583	61,036	62,915	23,664	25,919	197,276
Minnesota	26,391	28,983	29,610	11,133	15,257	93,655
Mississippi	NA	6,288	6,870	3,310	NA	NA
Missouri	NA	25,383	24,555	9,467	NA	NA
Montana	3,637	4,505	4,468	1,459	2,178	13,932
Nebraska	9,140	10,751	10,228	4,237	4,903	42,107
Nevada	5,653	5,340	4,775	2,575	3,078	21,822
New Hampshire	2,218	2,152	2,292	1,051	1,167	NA
New Jersey	38,912	36,107	45,285	18,713	20,200	147,228
New Mexico	7,752	8,088	7,293	3,243	4,509	26,151
New York	66,836	80,563	NA	31,659	^R 35,177	^R 340,605
North Carolina	12,285	11,909	13,334	5,791	6,495	38,942
North Dakota	3,187	3,861	3,614	1,434	1,753	11,392
Ohio	51,037	59,957	63,725	23,991	27,046	182,416
Oklahoma	14,828	14,907	15,730	6,859	7,969	43,776
Oregon	7,198	7,697	7,438	3,308	3,889	25,380
Pennsylvania	41,245	42,089	49,074	19,674	21,571	146,712
Rhode Island	3,406	3,439	3,881	1,620	1,786	12,303
South Carolina	5,736	5,488	5,918	2,781	2,955	20,713
South Dakota	2,913	3,652	3,506	1,292	1,621	10,426
Tennessee	NA	18,572	19,259	6,063	NA	NA
Texas	53,679	48,813	39,832	29,399	24,280	^R 208,746
Utah	8,778	9,525	9,152	4,235	4,544	31,130
Vermont	923	921	903	436	487	3,051
Virginia	17,071	16,691	16,747	8,398	8,673	61,430
Washington	NA	13,749	13,149	8,122	NA	NA
West Virginia	9,660	7,555	8,342	6,096	3,564	26,927
Wisconsin	22,533	27,994	29,822	9,845	12,688	92,418
Wyoming	NA	3,104	2,380	1,288	NA	NA
Total	847,088	908,438	923,169	401,424	^R445,663	^R3,282,426

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	December	November	October	September	August	July
Alabama	3,740	2,540	2,107	2,375	3,087	3,497
Alaska	2,748	2,304	2,221	1,336	1,104	1,167
Arizona	3,386	2,273	1,754	1,839	1,770	1,939
Arkansas	3,996	2,726	1,352	1,133	1,132	1,133
California	26,174	21,235	19,673	18,468	18,728	17,971
Colorado	8,532	NA	NA	NA	NA	NA
Connecticut	5,776	3,208	NA	1,560	1,754	1,895
Delaware	^R 864	520	282	233	183	206
District of Columbia	2,293	1,354	899	852	853	783
Florida	3,833	3,203	2,687	2,561	2,651	2,578
Georgia	7,991	6,146	3,654	2,811	2,626	2,709
Hawaii	185	NA	171	166	160	175
Idaho	1,657	982	585	411	356	373
Illinois	27,467	23,244	12,431	6,546	5,935	6,084
Indiana	NA	9,608	5,146	2,667	2,551	2,428
Iowa	7,166	5,681	3,031	1,358	1,110	1,306
Kansas	NA	4,780	2,508	2,087	2,685	3,283
Kentucky	6,217	4,223	NA	1,268	967	1,176
Louisiana	2,987	1,988	1,330	1,250	1,195	1,350
Maine	375	289	176	91	78	72
Maryland	6,365	8,614	2,917	2,271	2,226	2,378
Massachusetts	11,544	8,664	7,063	5,488	5,776	5,555
Michigan	26,512	19,536	10,084	6,211	5,889	2,278
Minnesota	12,420	10,831	5,320	2,563	2,522	2,496
Mississippi	2,928	2,026	1,157	NA	NA	NA
Missouri	9,543	6,200	NA	2,196	2,054	2,151
Montana	2,005	1,299	793	423	383	363
Nebraska	4,247	3,487	2,351	1,868	2,896	5,042
Nevada	2,567	1,797	1,270	1,192	1,145	1,097
New Hampshire	1,010	703	411	NA	217	216
New Jersey	20,186	13,739	7,215	6,062	5,793	6,094
New Mexico	3,956	2,423	1,160	1,020	997	984
New York	^R 36,071	^R 27,233	^R 15,051	^R 18,287	^R 22,102	^R 23,940
North Carolina	5,608	3,490	2,057	1,751	1,629	1,548
North Dakota	1,374	1,163	588	344	291	305
Ohio	25,219	17,840	9,823	5,006	4,408	4,153
Oklahoma	5,673	3,390	2,126	1,659	1,626	1,649
Oregon	3,341	2,016	1,363	1,023	912	1,007
Pennsylvania	20,160	14,246	9,659	5,298	3,779	4,680
Rhode Island	1,413	1,212	637	460	399	431
South Carolina	2,671	1,771	1,176	1,904	1,019	997
South Dakota	1,312	1,022	549	334	250	246
Tennessee	8,120	5,216	2,846	2,120	2,064	2,090
Texas	^R 23,104	^R 18,448	14,187	15,035	15,234	15,315
Utah	5,152	3,187	2,020	1,124	943	927
Vermont	403	282	184	108	80	80
Virginia	8,549	5,455	3,489	2,392	2,449	2,370
Washington	NA	NA	NA	NA	NA	NA
West Virginia	3,447	2,904	1,576	1,195	1,292	1,044
Wisconsin	12,954	10,586	5,664	2,901	2,961	2,769
Wyoming	1,092	1,065	633	NA	345	943
Total	^R 412,747	^R 316,783	^R 188,167	^R 147,354	^R 147,439	^R 150,596

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	June	May	April	March	February	January
Alabama	1,779	2,020	2,194	2,613	4,063	4,224
Alaska	1,191	1,546	1,914	2,482	2,198	3,042
Arizona	1,976	2,141	2,563	3,153	3,525	3,858
Arkansas	1,219	1,653	2,172	3,149	4,730	5,123
California	16,572	18,994	21,091	23,612	26,107	25,816
Colorado	NA	NA	6,121	NA	NA	NA
Connecticut	1,986	2,586	4,055	4,797	5,346	5,792
Delaware	281	420	628	858	1,046	1,025
District of Columbia	951	1,373	842	2,183	2,316	2,335
Florida	2,917	2,902	3,017	3,307	3,862	4,126
Georgia	2,800	3,216	4,152	4,864	7,924	8,582
Hawaii	170	166	174	180	188	188
Idaho	399	686	1,041	1,345	1,784	1,816
Illinois	6,145	10,664	16,797	23,444	30,059	37,125
Indiana	6,344	9,965	7,610	10,465	12,807	15,715
Iowa	1,262	2,376	3,976	5,758	7,056	10,137
Kansas	2,078	2,798	4,004	6,012	8,130	7,190
Kentucky	1,181	1,890	2,913	4,093	5,483	7,206
Louisiana	1,408	1,492	1,837	3,313	3,574	3,979
Maine	92	152	231	378	348	433
Maryland	2,305	2,735	4,420	5,563	6,380	7,080
Massachusetts	7,151	6,266	9,068	11,630	13,854	13,824
Michigan	7,664	13,205	19,207	25,654	28,433	32,603
Minnesota	3,004	5,155	8,361	12,000	13,403	15,580
Mississippi	1,176	1,237	1,533	2,106	3,062	3,226
Missouri	2,457	3,569	5,786	7,970	12,828	12,556
Montana	451	714	1,342	1,652	1,947	2,558
Nebraska	1,728	2,430	3,190	4,117	4,845	5,907
Nevada	1,409	1,666	1,896	2,442	2,629	2,711
New Hampshire	286	472	739	954	1,079	1,073
New Jersey	7,027	9,816	13,645	21,543	14,211	21,897
New Mexico	960	1,766	1,862	2,935	3,938	4,151
New York	^R 24,103	^R 25,257	^R 31,231	^R 36,768	^R 41,464	^R 39,099
North Carolina	1,770	2,401	2,973	3,806	5,850	6,059
North Dakota	343	619	1,095	1,408	1,879	1,982
Ohio	6,276	11,339	15,190	23,205	28,174	31,783
Oklahoma	1,517	2,617	3,571	5,041	7,183	7,724
Oregon	1,067	1,574	2,304	3,076	3,686	4,011
Pennsylvania	5,554	10,354	13,007	17,888	19,583	22,506
Rhode Island	537	892	1,144	1,740	1,744	1,694
South Carolina	1,214	1,278	1,379	1,816	2,689	2,799
South Dakota	283	604	940	1,235	1,607	2,045
Tennessee	NA	3,242	4,276	NA	9,488	9,084
Texas	11,993	12,860	13,790	^R 19,967	21,368	27,444
Utah	946	1,268	2,675	3,363	4,473	5,051
Vermont	108	160	296	429	444	477
Virginia	2,681	4,381	5,762	7,212	8,021	8,670
Washington	2,917	4,098	4,100	5,627	6,275	7,474
West Virginia	1,181	1,693	2,222	2,816	3,652	3,903
Wisconsin	2,868	5,507	7,225	10,989	12,071	15,922
Wyoming	633	1,065	1,445	1,593	1,423	1,681
Total	^R 158,726	^R 212,328	^R 273,008	^R 366,841	^R 427,989	^R 480,449

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1996					
	Total	December	November	October	September	August
Alabama	29,002	3,123	1,991	1,402	1,207	1,133
Alaska	27,315	3,236	2,743	2,337	1,617	1,396
Arizona	29,102	3,259	2,461	1,748	1,680	1,753
Arkansas	31,009	3,876	2,462	1,356	1,106	1,060
California	236,332	24,836	21,313	18,727	17,544	17,540
Colorado	68,931	9,028	5,807	3,306	2,227	2,156
Connecticut	39,818	4,902	3,112	2,400	1,822	1,714
Delaware	6,695	821	502	277	223	203
District of Columbia	16,353	2,325	1,195	804	774	750
Florida	41,898	3,830	3,179	2,957	2,840	2,716
Georgia	61,377	7,462	5,450	3,339	2,673	2,594
Hawaii	2,132	176	160	170	171	166
Idaho	11,540	1,621	1,107	597	421	354
Illinois	218,086	32,425	25,216	12,090	7,125	5,314
Indiana	87,568	12,378	9,122	4,102	2,202	2,104
Iowa	54,576	8,510	5,896	2,101	1,926	1,080
Kansas	57,231	9,187	4,867	2,057	1,286	3,505
Kentucky	40,980	5,892	4,439	2,241	1,194	1,123
Louisiana	25,769	2,435	1,680	1,395	1,305	1,321
Maine	2,566	310	280	172	78	75
Maryland	45,891	5,433	4,693	2,427	1,922	1,866
Massachusetts	96,192	11,752	9,718	5,432	4,767	4,274
Michigan	201,431	26,123	19,486	9,472	6,146	5,383
Minnesota	98,580	15,009	10,756	5,479	2,867	2,254
Mississippi	22,230	2,333	1,631	1,088	1,078	1,198
Missouri	72,833	10,204	6,136	2,959	2,235	2,356
Montana	14,836	2,123	1,659	848	498	374
Nebraska	40,833	5,032	3,678	2,778	2,273	2,489
Nevada	20,469	2,417	1,817	1,269	1,116	1,062
New Hampshire	7,099	896	698	360	201	193
New Jersey	150,432	18,834	12,586	7,731	5,870	5,536
New Mexico	26,544	3,553	2,450	1,365	1,079	1,352
New York	253,129	NA	NA	NA	NA	NA
North Carolina	40,467	5,160	3,240	1,917	1,658	1,575
North Dakota	12,165	1,726	1,286	661	410	301
Ohio	190,195	26,298	18,274	8,548	4,048	4,401
Oklahoma	46,284	6,014	3,273	1,900	1,759	1,678
Oregon	25,622	3,595	2,314	1,306	1,023	905
Pennsylvania	154,677	22,333	15,107	8,161	4,302	4,365
Rhode Island	12,301	1,290	972	648	581	443
South Carolina	20,329	2,447	1,644	1,157	1,041	957
South Dakota	11,602	1,813	1,237	571	352	283
Tennessee	58,513	7,599	5,116	2,830	2,354	1,979
Texas	178,573	18,053	12,865	10,151	8,830	12,079
Utah	29,666	4,220	3,185	2,073	1,279	874
Vermont	2,825	348	276	162	90	69
Virginia	59,294	7,489	5,776	3,363	2,401	2,081
Washington	48,252	6,623	4,489	2,701	1,920	1,697
West Virginia	28,030	3,400	2,494	1,620	1,171	1,259
Wisconsin	93,868	13,368	11,029	4,694	2,376	2,294
Wyoming	9,735	1,748	1,301	640	250	197
Total	3,161,176	409,165	294,522	171,277	124,490	122,985

^R = Revised Data.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Deliveries for total year 1996 may not equal the sum of the twelve months. Gas volumes delivered for use as vehicle fuel are included in the annual total but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997
				February	January	Total
Alabama	34,923	33,874	34,624	16,441	18,483	206,129
Alaska	12,606	13,538	10,922	6,152	6,454	73,863
Arizona	4,759	3,986	4,598	2,226	2,533	27,134
Arkansas	25,453	25,939	25,195	12,114	13,339	147,046
California	131,540	114,611	116,322	67,501	64,039	731,180
Colorado	NA	NA	15,201	5,806	NA	NA
Connecticut	6,551	6,119	4,856	3,149	3,402	35,031
Delaware	3,048	2,435	2,252	1,443	1,604	14,841
District of Columbia	0	0	0	0	0	0
Florida	24,050	24,048	23,495	11,148	12,902	NA
Georgia	27,143	31,429	28,019	13,335	13,808	170,988
Hawaii	0	0	0	0	0	0
Idaho ^a	6,826	5,968	6,397	3,482	3,344	35,089
Illinois	61,927	64,523	68,877	28,719	33,208	316,352
Indiana	NA	54,881	54,458	25,847	NA	NA
Iowa	20,836	20,522	20,732	9,516	11,321	111,430
Kansas	17,509	19,909	19,886	7,811	9,697	NA
Kentucky	17,390	19,447	18,841	7,550	9,839	NA
Louisiana	156,090	161,408	167,497	73,162	82,928	983,217
Maine	404	342	335	202	202	2,525
Maryland	24,376	8,973	6,780	10,677	13,699	61,353
Massachusetts	18,366	19,994	16,843	8,443	9,923	^R 110,880
Michigan	65,360	66,116	69,036	31,380	33,980	326,414
Minnesota	19,215	19,545	17,530	10,044	9,171	102,200
Mississippi	NA	14,023	14,858	6,814	NA	NA
Missouri	NA	16,560	15,291	6,360	NA	NA
Montana	3,333	3,547	3,432	1,449	1,884	18,122
Nebraska	6,382	6,068	6,899	2,902	3,481	31,322
Nevada	3,865	5,137	5,320	1,979	1,885	31,100
New Hampshire	978	822	693	498	481	NA
New Jersey	36,634	34,911	34,142	17,655	18,980	202,654
New Mexico	3,806	4,727	4,441	1,823	1,984	24,853
New York	51,622	59,638	57,854	26,509	^R 25,113	^R 325,392
North Carolina	21,157	19,118	14,310	10,404	10,752	116,320
North Dakota	1,958	2,286	1,305	948	1,010	10,999
Ohio	67,691	68,679	72,580	31,779	35,912	336,659
Oklahoma	33,628	37,703	35,500	17,131	16,497	205,823
Oregon	18,504	14,928	13,071	8,744	9,760	89,782
Pennsylvania	42,926	46,625	46,141	20,811	22,115	^R 235,913
Rhode Island	4,183	4,124	2,745	2,011	2,173	24,470
South Carolina	18,773	16,207	12,558	9,129	9,645	115,115
South Dakota	1,065	1,668	1,242	500	565	6,961
Tennessee	NA	24,487	22,162	12,628	NA	NA
Texas	267,278	347,737	357,795	117,801	149,477	NA
Utah	8,815	7,507	7,626	4,080	4,735	44,290
Vermont	427	377	270	205	223	2,337
Virginia	14,191	16,569	14,997	7,444	6,747	84,644
Washington	NA	18,282	19,847	11,107	NA	NA
West Virginia	6,206	8,222	8,461	1,696	4,510	51,114
Wisconsin	29,635	32,919	31,921	13,298	16,337	152,545
Wyoming	NA	8,852	8,890	5,777	NA	NA
Total	1,474,250	1,553,461	1,547,047	697,631	^R776,619	^R8,766,431

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	December	November	October	September	August	July
Alabama	18,755	17,910	17,161	16,150	16,827	16,848
Alaska	6,876	5,571	6,313	4,233	6,395	5,968
Arizona	2,688	2,360	2,335	2,582	2,375	2,246
Arkansas	13,202	12,751	12,471	11,035	11,994	11,785
California	63,859	61,447	60,283	65,816	67,815	65,810
Colorado	7,088	NA	NA	NA	NA	NA
Connecticut	3,422	3,408	2,588	2,362	2,550	2,440
Delaware	1,580	1,327	1,202	1,107	1,017	1,106
District of Columbia	0	0	0	0	0	0
Florida	12,641	12,056	12,083	NA	11,529	12,164
Georgia	12,800	12,468	12,817	12,855	13,575	12,874
Hawaii	0	—	0	0	0	0
Idaho ^a	3,159	3,109	3,226	2,756	2,371	2,723
Illinois	30,515	27,702	24,750	22,004	20,706	22,431
Indiana	NA	26,650	23,332	21,152	20,475	19,853
Iowa	10,686	10,199	9,886	8,468	8,680	7,768
Kansas	NA	8,212	7,830	7,321	7,998	11,607
Kentucky	9,442	8,835	NA	7,052	7,079	6,526
Louisiana	81,573	80,707	84,368	82,780	83,946	80,979
Maine	216	296	243	208	191	178
Maryland	13,713	263	4,308	4,427	5,019	4,767
Massachusetts	9,185	8,316	8,095	7,625	8,946	8,930
Michigan	31,551	27,735	24,470	23,655	23,705	16,029
Minnesota	9,571	9,674	8,759	7,183	7,771	6,780
Mississippi	7,043	7,238	6,572	NA	NA	NA
Missouri	6,701	6,057	NA	4,322	4,338	4,492
Montana	2,064	1,850	1,612	1,290	1,253	1,093
Nebraska	3,723	1,923	2,697	2,050	2,627	1,207
Nevada	2,530	2,499	2,689	2,654	2,675	2,517
New Hampshire	468	442	499	NA	451	422
New Jersey	17,569	15,519	16,683	16,219	17,715	16,450
New Mexico	2,146	2,019	1,881	1,982	1,957	2,097
New York	^R 27,393	^R 27,674	^R 21,794	^R 26,738	^R 24,589	^R 27,876
North Carolina	10,426	9,608	9,568	9,017	9,696	9,102
North Dakota	929	869	812	754	817	473
Ohio	32,492	30,107	26,986	24,750	24,078	22,725
Oklahoma	16,600	15,704	15,473	16,687	17,620	16,618
Oregon	9,596	8,694	8,284	8,041	8,313	7,289
Pennsylvania	20,983	21,509	17,230	16,783	17,206	^R 16,881
Rhode Island	2,179	2,148	1,509	1,440	1,491	2,159
South Carolina	9,344	8,702	8,239	8,883	10,653	17,104
South Dakota	606	618	425	470	499	322
Tennessee	12,466	8,602	11,242	13,313	13,153	10,831
Texas	174,230	162,492	165,162	NA	172,857	166,725
Utah	4,504	4,129	4,228	2,497	3,369	3,482
Vermont	235	226	224	176	157	144
Virginia	7,773	6,522	5,914	6,951	8,927	8,064
Washington	NA	NA	NA	NA	NA	NA
West Virginia	4,610	4,353	4,150	4,032	4,106	3,991
Wisconsin	14,848	14,202	11,931	10,069	9,521	9,041
Wyoming	4,102	4,328	NA	NA	3,672	3,234
Total	^R 789,586	^R 724,329	^R 706,294	^R 688,074	^R 716,475	^R 695,288

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	June	May	April	March	February	January
Alabama	16,253	17,284	18,182	16,885	16,341	17,534
Alaska	5,915	5,619	6,443	6,993	6,448	7,090
Arizona	2,170	2,332	1,989	2,071	1,944	2,041
Arkansas	11,598	11,903	12,008	12,361	12,195	13,744
California	58,874	58,119	57,480	57,065	55,756	58,855
Colorado	NA	NA	6,831	NA	NA	NA
Connecticut	2,441	2,870	3,308	3,521	3,031	3,088
Delaware	1,156	1,308	1,354	1,249	1,192	1,243
District of Columbia	0	0	0	0	0	0
Florida	11,539	12,515	12,365	11,905	11,527	12,521
Georgia	12,448	16,828	16,740	16,153	16,385	15,044
Hawaii	0	0	0	0	0	0
Idaho ^a	2,724	2,673	3,180	3,200	2,802	3,166
Illinois	22,272	25,139	26,550	29,761	31,673	32,850
Indiana	17,289	19,839	23,608	26,703	25,597	29,284
Iowa	7,823	8,516	9,081	9,800	9,785	10,738
Kansas	8,284	8,904	8,519	9,297	8,058	11,851
Kentucky	6,669	7,704	7,769	8,408	8,964	10,483
Louisiana	82,324	83,780	82,622	78,729	78,331	83,077
Maine	197	226	247	182	162	180
Maryland	5,126	4,734	4,495	5,528	4,661	4,312
Massachusetts	10,487	8,389	10,392	10,520	10,375	^R 9,619
Michigan	25,327	27,343	27,854	32,629	32,134	33,982
Minnesota	7,681	7,566	8,338	9,333	10,082	9,463
Mississippi	6,054	5,804	6,535	6,721	6,686	7,337
Missouri	4,810	4,987	7,149	5,099	9,463	7,097
Montana	1,176	1,365	1,178	1,695	1,634	1,913
Nebraska	2,343	2,465	3,051	3,167	3,090	2,979
Nevada	2,519	2,791	2,424	2,665	2,462	2,675
New Hampshire	434	905	632	570	411	411
New Jersey	15,822	16,773	16,587	18,406	15,694	19,217
New Mexico	2,041	2,123	1,935	1,944	2,119	2,608
New York	^R 25,785	^R 25,745	^R 27,455	^R 30,706	^R 31,100	^R 28,538
North Carolina	9,195	9,687	10,561	10,341	9,950	9,168
North Dakota	707	911	867	1,574	1,253	1,033
Ohio	22,461	26,644	27,049	30,688	32,631	36,048
Oklahoma	17,536	17,339	17,335	17,207	18,790	18,914
Oregon	5,557	6,033	6,322	6,726	6,525	8,402
Pennsylvania	16,359	18,780	21,556	22,001	23,241	23,384
Rhode Island	2,265	2,401	2,514	2,241	1,993	2,131
South Carolina	8,451	9,122	9,260	9,152	8,054	8,152
South Dakota	492	531	624	705	792	877
Tennessee	NA	11,767	12,548	NA	12,789	11,698
Texas	165,999	166,759	164,032	182,742	160,683	187,054
Utah	3,408	3,633	3,757	3,777	3,698	3,809
Vermont	146	218	200	234	197	181
Virginia	5,864	7,452	6,449	4,162	8,056	8,513
Washington	8,005	8,513	8,189	9,259	9,170	9,112
West Virginia	3,905	4,439	6,731	2,577	3,836	4,386
Wisconsin	9,458	11,310	13,597	15,650	14,948	17,970
Wyoming	3,858	4,125	3,864	3,795	3,792	5,060
Total	^R 681,129	^R 713,592	^R 731,755	^R 766,447	^R 747,162	^R 806,299

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1996					
	Total	December	November	October	September	August
Alabama	201,414	17,016	16,951	18,097	16,712	15,966
Alaska	75,616	7,034	6,450	6,421	6,288	6,961
Arizona	26,979	2,536	2,436	2,363	2,246	2,125
Arkansas	141,300	12,552	12,171	12,008	10,821	11,492
California	693,539	61,618	59,107	57,199	57,688	62,705
Colorado	83,640	7,861	7,271	5,109	6,270	7,792
Connecticut	32,451	3,013	3,386	3,108	2,589	2,561
Delaware	14,164	1,148	1,180	1,338	1,138	1,116
District of Columbia	0	0	0	0	0	0
Florida	136,722	11,160	11,655	10,931	11,324	11,135
Georgia	181,768	15,926	15,856	15,569	15,136	15,887
Hawaii	0	0	0	0	0	0
Idaho ^a	34,577	2,891	2,747	3,023	2,802	2,409
Illinois	322,275	35,802	30,672	24,666	19,734	20,575
Indiana	289,219	25,886	24,549	23,056	20,528	19,795
Iowa	113,995	10,955	11,178	9,460	7,445	8,696
Kansas	110,294	9,372	9,897	7,314	8,141	9,817
Kentucky	94,481	9,646	8,705	7,555	6,589	6,259
Louisiana	1,048,432	86,865	89,171	89,370	87,576	87,989
Maine	2,190	171	234	239	185	177
Maryland	50,022	4,956	3,981	4,196	4,055	4,335
Massachusetts	100,015	9,252	8,643	9,419	8,119	9,040
Michigan	347,043	32,754	29,990	25,126	24,187	23,728
Minnesota	102,471	9,903	10,656	9,236	7,719	7,451
Mississippi	80,887	6,503	6,507	7,363	6,432	6,200
Missouri	71,533	6,510	6,157	4,963	4,540	5,883
Montana	18,103	1,985	1,668	1,554	1,382	1,429
Nebraska	36,125	3,689	3,179	3,248	2,452	2,467
Nevada	32,606	2,859	2,705	2,548	2,728	2,787
New Hampshire	4,916	404	529	471	392	393
New Jersey	200,933	27,230	17,727	14,853	14,574	11,728
New Mexico	22,858	2,173	1,875	1,799	1,751	1,774
New York	322,661	31,374	26,765	25,488	25,312	26,927
North Carolina	104,124	9,413	9,964	10,368	8,412	8,358
North Dakota	7,911	924	955	685	552	425
Ohio	347,149	33,111	30,242	27,432	22,996	23,427
Oklahoma	201,024	19,194	15,941	16,689	16,741	17,073
Oregon	87,754	8,498	8,526	8,657	7,954	7,886
Pennsylvania	243,499	21,089	22,617	19,275	17,697	18,213
Rhode Island	25,829	2,553	2,992	3,189	2,921	2,998
South Carolina	95,493	8,646	8,699	8,836	7,982	8,162
South Dakota	7,182	715	694	523	427	471
Tennessee	126,545	12,264	12,388	10,679	10,240	9,810
Texas	2,138,155	181,384	171,353	181,999	186,067	171,985
Utah	42,213	3,693	3,663	3,592	3,436	3,374
Vermont	1,953	191	211	174	151	155
Virginia	84,357	9,782	7,474	6,080	5,162	7,113
Washington	114,236	9,758	10,859	10,660	10,161	9,892
West Virginia	49,997	4,443	4,418	4,310	4,596	3,932
Wisconsin	149,517	15,456	14,652	11,984	9,773	9,274
Wyoming	50,253	4,647	4,741	4,678	3,699	3,851
Total	8,870,422	806,805	764,387	736,900	705,823	703,997

^a Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components. Deliveries for total year 1995 in Idaho do not equal the sum of the twelve months.

^R = Revised Data.

NA = Not Available.

— = Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997
				February	January	Total
Alabama	519	281	217	157	362	9,996
Alaska	5,159	5,659	5,412	2,307	2,852	33,511
Arizona	1,765	677	1,576	804	962	23,384
Arkansas	561	833	691	272	289	24,802
California	45,033	31,667	39,684	18,278	26,755	377,967
Colorado	832	654	498	451	381	5,537
Connecticut	1,245	1,435	53	109	1,136	16,762
Delaware	329	3,814	3,596	74	256	16,090
District of Columbia	0	0	0	0	0	0
Florida	34,719	27,723	30,089	15,637	19,082	296,940
Georgia	159	59	29	57	102	7,341
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	7,549	2,849	1,717	3,535	4,014	44,606
Indiana	191	314	710	104	87	5,141
Iowa	466	465	338	202	264	4,123
Kansas	991	966	2,269	446	545	25,822
Kentucky	224	191	242	138	86	2,194
Louisiana	25,030	28,377	29,009	9,860	15,171	277,431
Maine	0	0	0	0	0	0
Maryland	414	232	178	223	191	11,004
Massachusetts	3,561	4,368	2,387	1,320	2,241	51,486
Michigan	5,735	4,257	5,195	2,496	3,239	33,288
Minnesota	225	779	428	105	119	6,097
Mississippi	5,867	5,923	6,705	2,775	3,092	73,081
Missouri	215	137	280	80	135	7,464
Montana	1	91	66	0	1	420
Nebraska	58	108	203	21	37	2,656
Nevada	6,155	2,830	5,601	3,128	3,027	51,776
New Hampshire	26	0	1	26	0	564
New Jersey	947	1,769	3,462	419	528	29,528
New Mexico	3,720	4,049	2,744	1,802	1,918	33,376
New York	26,999	17,459	6,907	10,274	16,724	217,493
North Carolina	12	9	44	1	11	4,511
North Dakota	0	0	0	0	0	1
Ohio	209	197	277	96	114	3,485
Oklahoma	11,665	11,075	15,520	5,205	6,460	128,822
Oregon	2,573	253	0	1,102	1,471	10,686
Pennsylvania	482	598	464	257	225	7,368
Rhode Island	4,212	4,109	3,197	1,599	2,613	27,162
South Carolina	44	15	10	11	33	2,731
South Dakota	69	46	11	6	63	1,730
Tennessee	0	0	0	0	0	1,635
Texas	103,422	114,869	132,567	49,071	54,351	1,056,582
Utah	296	298	289	144	153	4,079
Vermont	112	4	1	47	65	36
Virginia	1,330	237	1,504	476	853	11,571
Washington	498	8	91	5	492	2,619
West Virginia	50	36	49	29	21	219
Wisconsin	771	2,942	707	353	418	15,772
Wyoming	207	16	12	200	7	95
Total	304,646	282,678	305,027	133,700	170,946	2,968,985

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1997					
	December	November	October	September	August	July
Alabama	87	296	846	1,247	2,373	2,898
Alaska	3,023	2,676	2,689	2,296	2,439	2,734
Arizona	752	400	1,544	5,106	4,809	4,114
Arkansas	294	375	2,295	3,377	5,270	7,484
California	27,218	22,372	35,085	56,405	48,127	43,831
Colorado	451	385	642	667	716	703
Connecticut	569	1,485	1,873	1,769	2,362	2,474
Delaware	700	682	356	667	1,592	2,000
District of Columbia	0	0	0	0	0	0
Florida	21,716	14,283	21,226	26,875	33,664	33,336
Georgia	49	124	308	1,160	2,200	2,592
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	5,019	3,906	3,796	2,374	3,806	7,977
Indiana	152	234	312	268	530	1,863
Iowa	207	251	457	234	371	838
Kansas	1,993	2,480	2,646	2,113	3,491	6,349
Kentucky	158	190	201	181	312	525
Louisiana	16,810	14,557	22,089	30,559	34,584	39,937
Maine	0	0	0	0	0	0
Maryland	209	364	750	623	1,051	3,379
Massachusetts	2,419	3,186	3,140	4,800	5,595	6,031
Michigan	3,028	3,135	3,243	2,921	2,851	3,675
Minnesota	112	139	382	289	669	1,134
Mississippi	4,576	4,062	5,433	8,119	11,937	14,001
Missouri	311	340	557	749	1,212	2,789
Montana	21	30	40	27	46	115
Nebraska	34	77	354	263	364	878
Nevada	3,651	1,804	4,368	6,212	7,833	7,257
New Hampshire	31	24	54	54	70	11
New Jersey	553	1,341	2,087	1,349	4,239	8,143
New Mexico	1,999	2,225	3,227	2,835	4,338	4,022
New York	14,715	12,693	16,569	19,701	29,767	35,237
North Carolina	3	25	507	433	747	1,887
North Dakota	0	0	0	0	0	1
Ohio	122	246	397	268	304	1,073
Oklahoma	11,407	8,236	10,068	14,026	20,504	20,851
Oregon	1,641	920	2,368	2,367	2,531	306
Pennsylvania	365	212	301	418	923	2,722
Rhode Island	2,604	2,490	2,505	2,365	2,424	2,003
South Carolina	35	112	240	212	422	921
South Dakota	83	90	45	88	228	581
Tennessee	0	0	209	0	328	843
Texas	69,623	72,461	90,971	126,102	141,943	144,449
Utah	178	174	135	912	1,087	824
Vermont	4	2	4	2	4	4
Virginia	918	381	789	583	1,476	2,536
Washington	187	220	164	1,191	731	25
West Virginia	11	2	17	15	9	23
Wisconsin	467	400	743	697	895	2,168
Wyoming	15	15	6	5	3	4
Total	198,522	180,102	246,040	332,925	391,176	427,549

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1997					
	June	May	April	March	February	January
Alabama	930	482	386	168	156	125
Alaska	2,579	2,902	2,923	3,593	2,438	3,221
Arizona	1,931	2,740	723	588	358	319
Arkansas	3,443	575	606	250	214	619
California	26,461	37,116	25,337	24,348	14,189	17,478
Colorado	337	393	264	326	259	395
Connecticut	1,400	1,169	1,260	967	1,238	197
Delaware	1,096	1,063	1,841	2,279	2,068	1,746
District of Columbia	0	0	0	0	0	0
Florida	31,395	29,651	28,108	28,965	17,145	10,578
Georgia	440	203	177	30	18	42
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	4,586	2,897	4,921	2,474	1,661	1,188
Indiana	796	232	221	220	151	162
Iowa	393	270	254	383	218	247
Kansas	3,142	1,237	847	558	413	553
Kentucky	170	21	117	130	80	111
Louisiana	29,959	25,574	19,124	15,862	13,616	14,761
Maine	0	0	0	0	0	0
Maryland	1,856	725	1,478	336	47	185
Massachusetts	6,223	3,821	6,630	5,273	2,793	1,575
Michigan	2,753	2,748	2,263	2,413	2,356	1,901
Minnesota	684	594	619	695	123	656
Mississippi	8,382	4,685	3,033	2,930	2,716	3,207
Missouri	1,022	95	173	77	52	85
Montana	8	7	15	18	27	64
Nebraska	218	108	172	81	77	31
Nevada	5,269	5,215	3,517	3,820	1,362	1,468
New Hampshire	319	0	0	0	0	0
New Jersey	4,610	1,478	1,868	2,091	1,023	746
New Mexico	2,922	2,443	2,547	2,768	1,990	2,059
New York	28,198	16,938	11,475	14,741	12,486	4,972
North Carolina	811	61	26	1	9	0
North Dakota	0	0	0	0	0	0
Ohio	596	106	107	71	71	125
Oklahoma	12,246	6,710	7,023	6,677	4,843	6,231
Oregon	126	3	0	171	0	253
Pennsylvania	886	294	326	324	316	281
Rhode Island	2,184	2,445	1,854	2,179	2,021	2,088
South Carolina	621	67	72	12	4	11
South Dakota	360	85	85	39	19	26
Tennessee	255	0	0	0	0	0
Texas	103,279	73,212	59,300	60,371	54,877	59,992
Utah	25	147	143	155	137	161
Vermont	3	3	3	3	2	2
Virginia	1,350	670	1,497	1,133	47	190
Washington	1	86	5	0	2	6
West Virginia	40	33	9	23	23	12
Wisconsin	1,686	1,851	1,768	2,154	1,773	1,169
Wyoming	13	6	6	6	7	9
Total	296,004	231,162	193,124	189,704	143,428	139,250

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1996					
	Total	December	November	October	September	August
Alabama	6,146	291	480	384	593	708
Alaska	31,767	3,078	2,683	2,637	2,449	2,595
Arizona	19,248	443	296	2,242	2,145	4,797
Arkansas	33,988	1,226	297	201	4,215	5,421
California	318,035	17,182	22,900	32,454	35,564	53,941
Colorado	5,511	454	319	506	724	798
Connecticut	10,456	131	912	1,643	2,168	2,269
Delaware	23,370	1,048	2,129	2,330	2,562	2,416
District of Columbia	0	0	0	0	0	0
Florida	283,557	13,124	17,908	28,677	33,595	33,376
Georgia	4,674	43	80	9	243	588
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	25,863	550	1,859	1,046	2,309	4,289
Indiana	4,330	236	256	144	197	570
Iowa	3,491	236	232	211	277	298
Kansas	22,607	672	578	808	1,959	4,148
Kentucky	1,836	82	104	65	83	281
Louisiana	252,139	12,921	14,958	18,877	21,484	32,455
Maine	0	0	0	0	0	0
Maryland	8,455	211	263	485	1,521	1,920
Massachusetts	45,037	1,562	3,081	8,648	9,009	7,190
Michigan	32,559	2,888	3,151	2,705	3,320	2,746
Minnesota	5,301	419	403	469	602	624
Mississippi	83,251	3,671	6,561	5,392	9,812	12,074
Missouri	5,223	69	238	193	287	896
Montana	470	72	85	42	35	23
Nebraska	2,351	82	94	122	161	213
Nevada	46,766	2,311	2,458	4,266	4,900	6,394
New Hampshire	3	0	1	0	0	0
New Jersey	25,825	445	1,038	1,481	3,575	4,064
New Mexico	29,969	2,244	2,423	2,787	2,492	3,456
New York	142,688	5,108	10,715	14,459	21,421	24,086
North Carolina	2,381	1	1	112	75	196
North Dakota	3	0	0	0	1	1
Ohio	2,867	106	259	56	257	593
Oklahoma	136,436	6,107	8,068	9,395	13,201	19,557
Oregon	14,015	334	1,289	3,049	3,801	3,202
Pennsylvania	7,239	282	654	650	1,150	1,778
Rhode Island	25,071	2,167	2,449	2,424	2,236	2,417
South Carolina	1,206	20	16	23	350	64
South Dakota	725	35	80	5	76	178
Tennessee	572	0	1	0	79	240
Texas	1,039,155	51,332	59,062	75,410	90,570	119,967
Utah	3,428	142	130	133	554	870
Vermont	24	3	3	3	3	2
Virginia	10,275	333	193	473	1,677	1,578
Washington	6,590	21	358	801	2,251	2,558
West Virginia	205	43	3	1	26	15
Wisconsin	7,303	702	803	572	739	1,198
Wyoming	87	6	6	7	8	9
Total	2,732,496	132,434	169,879	226,394	284,758	367,059

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997
				February	January	Total
Alabama	62,892	60,829	66,366	29,830	33,062	298,692
Alaska	24,414	28,457	27,098	9,985	14,428	145,913
Arizona	26,894	23,116	22,532	12,168	14,726	111,857
Arkansas	46,874	52,664	54,267	23,129	23,745	243,839
California	394,330	339,992	327,546	190,777	203,553	1,849,819
Colorado	NA	68,936	71,434	32,286	NA	271,769
Connecticut	30,941	31,485	31,693	14,383	16,558	132,962
Delaware	7,979	11,480	11,748	3,776	4,203	^R 46,397
District of Columbia	9,698	10,014	10,475	4,747	4,951	32,732
Florida	73,182	63,993	67,985	33,793	39,389	493,504
Georgia	82,091	85,568	90,067	39,542	42,548	350,085
Hawaii	484	476	492	232	252	2,692
Idaho	15,579	14,674	14,793	7,284	8,295	61,769
Illinois	254,028	303,948	318,071	107,855	146,173	1,064,270
Indiana	NA	142,790	146,716	57,078	NA	556,723
Iowa	59,024	67,630	68,637	25,941	33,082	247,128
Kansas	57,144	64,102	69,454	26,029	31,115	262,063
Kentucky	47,468	55,233	57,533	21,257	26,211	204,648
Louisiana	207,893	216,065	226,503	95,973	^R 111,920	1,338,715
Maine	1,553	1,421	1,436	777	777	6,247
Maryland	61,584	48,432	51,342	28,426	33,158	202,721
Massachusetts	82,605	86,456	82,802	39,778	42,828	^R 379,218
Michigan	226,291	255,825	269,319	106,517	119,774	936,410
Minnesota	82,457	95,012	95,664	36,306	46,151	334,344
Mississippi	NA	36,250	40,485	17,463	NA	199,656
Missouri	NA	91,006	91,277	34,874	NA	275,142
Montana	12,793	15,078	14,781	5,313	7,480	53,469
Nebraska	30,124	34,449	34,363	13,802	16,322	123,199
Nevada	24,847	21,602	22,704	11,832	13,015	129,853
New Hampshire	5,373	5,171	5,325	2,585	2,788	21,006
New Jersey	136,607	143,225	161,181	66,099	70,507	592,136
New Mexico	27,499	29,815	26,201	11,205	16,294	120,759
New York	235,937	288,418	NA	110,475	^R 125,462	^R 1,284,368
North Carolina	53,967	51,088	52,144	25,906	28,061	212,766
North Dakota	8,616	10,443	8,953	3,944	4,673	34,293
Ohio	213,375	246,554	264,445	99,776	113,599	877,213
Oklahoma	85,546	90,292	96,098	40,846	44,699	450,167
Oregon	38,973	34,043	31,142	17,736	21,237	158,903
Pennsylvania	150,893	176,592	193,287	75,456	75,437	^R 652,300
Rhode Island	17,301	17,452	16,285	7,949	9,352	82,097
South Carolina	35,162	31,800	31,030	17,097	18,065	164,034
South Dakota	7,909	10,190	9,324	3,464	4,445	32,342
Tennessee	NA	67,940	70,018	28,238	NA	266,475
Texas	491,734	587,279	612,284	226,771	264,962	^R 3,506,486
Utah	34,479	35,572	34,193	16,652	17,827	137,598
Vermont	2,287	2,137	2,059	1,085	1,202	8,055
Virginia	55,205	58,363	61,600	27,386	27,819	231,361
Washington	NA	52,302	52,260	32,753	NA	257,133
West Virginia	26,620	27,412	30,412	12,991	13,629	113,410
Wisconsin	90,645	109,342	110,418	39,114	51,531	397,071
Wyoming	NA	15,875	15,459	8,825	NA	70,828
Total	4,099,938	4,418,288	4,539,797	1,907,504	^R2,192,434	^R20,026,635

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	December	November	October	September	August	July
Alabama	30,497	24,708	21,550	21,022	23,525	24,635
Alaska	14,808	12,235	12,792	8,608	10,340	10,332
Arizona	11,607	7,012	6,690	10,654	9,864	9,318
Arkansas	23,868	19,870	17,463	16,495	19,314	21,430
California	186,761	145,591	139,946	162,462	155,621	154,451
Colorado	32,610	22,970	16,449	14,115	15,213	16,384
Connecticut	15,668	11,727	8,439	6,691	7,568	7,758
Delaware	^R 4,350	3,196	2,090	2,190	2,970	3,505
District of Columbia	4,605	2,768	1,452	1,245	1,226	1,202
Florida	40,227	30,734	36,752	41,672	48,586	48,863
Georgia	40,563	35,202	23,556	20,016	21,344	21,371
Hawaii	230	293	209	206	201	218
Idaho	7,188	5,520	4,450	3,482	3,021	3,441
Illinois	132,686	111,168	70,463	42,621	40,557	46,870
Indiana	68,314	53,950	36,918	27,578	26,544	26,996
Iowa	30,098	24,723	17,401	11,705	11,634	11,505
Kansas	30,151	24,284	15,403	13,149	15,790	23,101
Kentucky	26,970	21,324	14,326	9,949	9,434	9,646
Louisiana	109,377	101,574	109,871	116,287	121,396	123,951
Maine	733	692	486	329	294	271
Maryland	31,215	17,537	11,517	9,389	10,095	12,430
Massachusetts	38,422	30,307	23,079	20,467	22,754	23,347
Michigan	111,072	88,305	55,632	41,554	39,709	26,729
Minnesota	39,808	36,021	21,273	12,898	13,518	13,116
Mississippi	18,874	15,871	14,057	15,017	19,987	22,079
Missouri	35,563	24,674	12,066	9,892	10,007	12,149
Montana	7,288	5,208	3,676	2,248	2,129	1,983
Nebraska	13,794	9,888	6,785	5,118	6,824	8,142
Nevada	12,615	8,017	9,346	10,860	12,430	11,759
New Hampshire	2,442	1,785	1,291	918	893	810
New Jersey	68,929	50,492	34,828	28,939	32,427	35,789
New Mexico	16,263	10,735	7,477	6,667	8,136	7,917
New York	^R 128,789	^R 102,978	^R 70,030	^R 74,703	^R 86,863	^R 97,493
North Carolina	25,256	18,008	13,573	12,137	12,973	13,611
North Dakota	3,774	3,211	1,875	1,327	1,314	1,006
Ohio	108,921	85,201	56,541	37,252	34,992	35,483
Oklahoma	44,734	33,511	29,633	33,919	41,269	40,796
Oregon	19,412	14,439	13,513	12,168	12,426	9,439
Pennsylvania	79,331	62,304	40,177	28,814	26,622	^R 29,436
Rhode Island	8,705	7,313	5,310	4,739	4,757	5,072
South Carolina	16,684	12,984	10,286	11,465	12,538	19,535
South Dakota	3,736	3,059	1,587	1,153	1,210	1,397
Tennessee	31,651	20,204	16,202	16,619	16,625	14,883
Texas	^R 300,576	^R 272,820	278,581	308,747	336,135	333,317
Utah	20,208	13,507	10,682	6,491	6,865	6,734
Vermont	988	724	529	345	293	285
Virginia	28,898	19,787	13,199	11,565	14,326	14,545
Washington	35,443	32,759	17,889	17,937	15,634	13,007
West Virginia	13,499	11,208	7,101	6,025	6,001	5,547
Wisconsin	47,427	41,410	26,493	16,641	15,927	16,856
Wyoming	6,350	6,583	5,250	3,538	4,271	4,475
Total	^R 2,131,976	^R 1,720,391	^R 1,376,182	^R 1,300,030	^R 1,374,391	^R 1,404,414

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	June	May	April	March	February	January
Alabama	20,567	22,424	23,941	24,993	29,657	31,172
Alaska	10,193	10,855	12,458	14,835	12,702	15,755
Arizona	7,231	8,784	7,534	10,047	10,920	12,196
Arkansas	17,499	16,456	18,079	20,701	24,893	27,771
California	125,478	142,936	143,180	153,401	162,740	177,251
Colorado	15,295	19,364	22,145	28,288	32,911	36,025
Connecticut	7,207	8,957	13,002	14,461	16,153	15,331
Delaware	2,852	3,347	4,765	5,651	5,917	5,563
District of Columbia	1,513	2,317	2,158	4,232	4,971	5,042
Florida	46,706	46,012	44,503	45,455	34,602	29,392
Georgia	19,045	24,082	29,290	30,048	40,351	45,217
Hawaii	211	207	215	226	237	239
Idaho	3,556	4,298	5,685	6,454	7,128	7,546
Illinois	44,620	64,781	89,460	117,095	132,731	171,217
Indiana	29,386	39,518	46,657	58,071	64,849	77,941
Iowa	11,581	15,100	20,283	25,468	28,940	38,690
Kansas	15,156	16,520	19,773	24,635	28,706	35,397
Kentucky	9,592	12,569	15,682	19,924	23,491	31,742
Louisiana	115,741	113,669	107,263	103,522	104,512	111,553
Maine	323	434	562	702	643	778
Maryland	11,965	12,410	17,306	20,426	23,169	25,264
Massachusetts	28,231	25,392	38,213	42,550	44,676	^R 41,780
Michigan	47,754	70,254	87,580	111,995	120,468	135,357
Minnesota	14,868	20,089	28,753	38,988	43,573	51,438
Mississippi	16,531	13,189	13,005	14,795	17,431	18,819
Missouri	11,954	15,126	24,138	28,568	45,769	45,237
Montana	2,266	3,230	4,531	5,832	6,646	8,432
Nebraska	5,655	8,180	10,768	13,597	15,840	18,609
Nevada	10,179	11,093	9,855	12,098	10,278	11,324
New Hampshire	1,302	1,843	2,115	2,437	2,626	2,545
New Jersey	33,917	39,326	50,239	74,024	65,637	77,588
New Mexico	6,160	8,284	7,848	11,457	13,677	16,137
New York	^R 93,399	^R 94,944	^R 111,890	^R 134,862	^R 148,697	^R 139,721
North Carolina	13,375	15,140	17,647	19,958	25,811	25,277
North Dakota	1,384	2,260	3,140	4,558	5,115	5,328
Ohio	39,117	59,664	75,370	98,118	113,373	133,181
Oklahoma	33,405	30,523	34,088	37,995	43,503	46,790
Oregon	7,779	9,529	11,832	14,323	15,519	18,524
Pennsylvania	30,381	44,874	60,019	73,750	84,428	92,163
Rhode Island	5,713	6,909	7,506	8,621	8,649	8,803
South Carolina	10,987	11,697	12,486	13,572	15,741	16,059
South Dakota	1,503	2,004	2,900	3,604	4,506	5,684
Tennessee	15,757	18,028	21,621	26,945	34,363	33,577
Texas	288,867	263,252	251,146	^R 285,767	270,083	317,196
Utah	5,981	6,869	11,451	13,240	16,675	18,897
Vermont	354	569	782	1,048	1,059	1,078
Virginia	11,949	16,730	20,370	21,630	27,864	30,499
Washington	13,977	18,287	16,880	23,019	24,824	27,478
West Virginia	6,088	8,410	12,384	9,734	13,142	14,271
Wisconsin	16,978	26,124	33,702	46,172	48,115	61,227
Wyoming	4,900	6,272	6,374	6,938	6,883	8,992
Total	^R 1,296,427	^R 1,443,133	^R 1,632,573	^R 1,928,832	^R 2,085,193	^R 2,333,094

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1996					
	Total	December	November	October	September	August
Alabama	293,084	27,094	22,883	21,529	19,832	19,033
Alaska	150,877	15,528	13,584	12,633	10,943	11,496
Arizona	103,037	10,289	7,516	7,435	6,972	9,510
Arkansas	252,585	23,939	18,699	14,990	17,185	18,927
California	1,721,217	166,541	147,022	138,842	136,901	155,943
Colorado	269,006	33,157	22,968	13,807	11,994	13,252
Connecticut	126,488	13,888	10,932	8,990	7,570	7,498
Delaware	54,020	4,253	4,459	4,236	4,104	3,910
District of Columbia	33,644	4,731	2,448	1,382	1,175	1,130
Florida	478,471	29,697	33,713	43,317	48,450	47,884
Georgia	374,882	42,005	36,037	24,688	21,145	22,041
Hawaii	2,672	220	200	209	213	206
Idaho	61,058	6,736	5,424	4,267	3,588	3,040
Illinois	1,104,972	149,698	121,461	65,883	42,305	39,723
Indiana	561,056	64,588	52,504	35,148	26,545	25,587
Iowa	260,140	33,840	27,088	15,392	11,602	11,684
Kansas	275,508	33,619	24,789	13,341	13,359	19,111
Kentucky	207,529	25,797	22,270	12,879	9,256	8,916
Louisiana	1,382,966	108,393	NA	NA	112,202	123,596
Maine	5,722	601	619	478	291	274
Maryland	189,901	22,026	16,766	10,847	9,705	10,184
Massachusetts	355,609	36,513	31,385	28,511	24,573	22,967
Michigan	980,555	114,489	91,489	55,831	42,722	39,157
Minnesota	348,671	47,484	36,773	21,889	14,156	12,763
Mississippi	216,524	16,183	16,579	14,771	18,125	20,243
Missouri	286,814	37,323	24,218	12,436	9,811	11,582
Montana	55,584	7,466	5,870	3,712	2,549	2,257
Nebraska	128,297	16,087	10,994	8,322	5,903	6,101
Nevada	122,449	10,973	9,050	8,977	9,476	10,921
New Hampshire	19,031	2,155	1,895	1,144	761	742
New Jersey	599,810	76,491	50,284	33,981	29,492	26,043
New Mexico	113,059	13,633	10,437	7,281	6,165	7,418
New York	1,121,742	NA	NA	NA	NA	NA
North Carolina	205,783	23,182	17,666	14,099	11,058	10,992
North Dakota	32,670	4,544	3,497	1,900	1,219	936
Ohio	915,035	111,994	87,340	54,686	34,327	34,726
Oklahoma	460,373	42,614	33,004	30,251	33,379	39,824
Oregon	160,626	17,626	15,293	14,369	13,598	12,667
Pennsylvania	684,022	80,392	65,415	41,287	29,057	29,652
Rhode Island	82,041	8,359	7,830	6,999	6,206	6,308
South Carolina	146,434	15,449	12,527	10,815	9,849	9,602
South Dakota	33,594	4,805	3,425	1,677	1,171	1,162
Tennessee	256,053	30,041	23,454	15,496	13,863	13,130
Texas	3,585,201	284,720	261,074	NA	292,962	310,564
Utah	129,651	16,258	12,727	10,013	7,809	6,534
Vermont	7,325	844	698	440	300	273
Virginia	230,140	28,550	20,832	12,795	10,655	12,196
Washington	231,767	26,206	21,913	17,092	15,904	15,398
West Virginia	115,622	13,051	10,306	7,541	6,489	5,743
Wisconsin	398,581	50,811	43,208	25,032	16,019	15,491
Wyoming	73,609	8,146	7,382	6,411	4,324	4,322
Total	20,005,508	2,086,126	1,731,770	1,377,692	1,252,627	1,312,337

^R = Revised Data.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20. Average City Gate Price, by State, 1996-1998
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997		
				February	January	Total	December	November
Alabama	3.06	4.23	3.24	2.93	3.18	3.65	2.60	3.97
Alaska	1.74	1.85	1.58	1.72	1.75	1.81	1.82	1.82
Arizona	2.37	3.60	2.20	2.28	2.46	3.15	2.53	3.48
Arkansas	2.98	3.81	2.52	2.85	3.09	3.23	3.19	3.44
California	2.25	3.71	2.27	2.12	2.35	2.98	2.65	3.30
Colorado	NA	NA	2.12	2.62	NA	NA	2.99	NA
Connecticut	5.23	5.91	5.46	5.24	5.23	NA	4.73	3.87
Delaware	2.85	5.97	3.34	3.02	2.71	3.69	2.40	5.73
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.53	4.59	3.73	3.20	3.81	3.97	3.85	4.45
Georgia	3.31	4.53	3.55	3.18	3.43	3.99	3.67	4.04
Hawaii	6.08	6.93	5.55	5.75	6.40	NA	6.23	NA
Idaho	1.92	2.26	2.03	1.94	1.89	2.12	1.79	2.07
Illinois	2.81	3.60	3.14	2.85	2.78	3.28	2.92	3.72
Indiana	NA	3.71	3.21	2.48	NA	NA	NA	3.21
Iowa	3.63	3.84	2.80	3.33	3.80	4.05	4.44	4.84
Kansas	3.14	4.05	2.66	2.73	3.56	NA	NA	4.29
Kentucky	3.16	3.88	3.13	3.09	3.22	NA	4.07	4.28
Louisiana	2.74	3.70	3.42	2.65	2.81	NA	2.85	3.73
Maine	3.25	4.33	3.92	3.25	3.25	3.84	3.10	2.72
Maryland	3.26	3.98	3.55	3.43	2.96	4.01	3.37	4.22
Massachusetts	3.19	4.18	3.33	2.89	3.40	3.95	4.03	4.14
Michigan	2.92	3.68	3.03	2.89	2.94	2.99	3.19	3.51
Minnesota	3.10	4.05	2.85	2.90	3.27	3.67	4.06	4.52
Mississippi	NA	3.93	3.30	2.99	NA	NA	3.31	3.83
Missouri	NA	3.82	2.54	2.99	NA	NA	3.13	3.91
Montana	2.56	3.64	2.89	2.41	2.71	3.16	2.51	3.15
Nebraska	3.62	4.12	2.56	2.70	4.71	4.24	5.31	6.30
Nevada	3.02	3.81	2.49	3.00	3.03	3.39	2.84	3.71
New Hampshire	3.75	4.71	4.07	3.74	3.77	NA	3.72	4.02
New Jersey	3.85	4.49	3.75	3.38	4.37	4.17	3.77	4.49
New Mexico	2.13	3.22	1.60	2.02	2.24	2.53	2.31	2.85
New York	NA	NA	3.48	3.28	NA	NA	NA	NA
North Carolina	3.57	4.35	3.65	3.47	3.65	3.97	3.72	4.09
North Dakota	2.90	3.96	2.88	2.85	2.93	3.38	3.01	4.01
Ohio	4.56	5.32	3.80	4.27	4.82	5.16	4.35	4.66
Oklahoma	2.74	3.61	2.54	2.61	2.86	3.12	3.32	3.19
Oregon	2.43	2.68	2.01	2.31	2.53	2.58	2.42	2.73
Pennsylvania	3.66	4.18	3.18	3.64	3.68	4.06	3.71	4.32
Rhode Island	3.63	4.59	3.59	3.35	3.93	4.49	4.02	4.46
South Carolina	3.22	4.10	3.90	3.05	3.37	3.81	3.72	4.13
South Dakota	3.39	4.04	2.65	3.66	3.22	3.66	3.46	3.68
Tennessee	NA	3.94	4.53	3.84	NA	NA	3.63	2.02
Texas	3.10	4.48	3.17	2.87	3.26	3.67	3.97	3.86
Utah	3.45	2.70	2.19	3.68	3.25	2.79	3.46	3.07
Vermont	2.62	1.81	2.88	2.66	2.59	2.33	2.64	2.77
Virginia	3.81	4.54	3.64	3.63	3.97	4.13	3.65	4.15
Washington	NA	3.07	2.04	2.43	NA	NA	NA	NA
West Virginia	3.23	3.58	3.05	3.15	3.34	3.16	2.99	3.07
Wisconsin	3.12	3.88	2.83	2.99	3.21	NA	4.93	3.75
Wyoming	NA	3.92	2.27	3.31	NA	3.13	3.20	3.61
Total	3.19	4.05	3.15	3.09	3.28	3.61	3.48	3.86

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	4.17	3.83	3.88	4.10	3.86	3.54	3.16	3.20
Alaska	1.78	1.79	1.73	1.74	1.70	1.78	1.81	1.84
Arizona	3.80	3.74	3.16	2.98	3.32	3.18	2.61	2.22
Arkansas	3.61	2.87	3.28	2.78	2.77	2.59	2.48	2.46
California	3.18	2.74	2.79	3.72	2.67	2.55	2.30	2.25
Colorado	NA	NA	NA	NA	NA	NA	2.30	NA
Connecticut	NA	5.29	5.33	4.55	4.76	4.81	4.94	4.82
Delaware	5.23	1.04	4.07	3.51	3.44	3.20	3.00	4.16
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.64	3.82	3.31	3.41	3.50	3.09	3.62	4.04
Georgia	4.03	5.29	3.90	3.96	4.37	3.20	3.08	3.31
Hawaii	6.09	6.11	6.35	6.59	5.46	6.47	7.21	6.50
Idaho	2.01	2.17	2.50	2.16	2.83	2.98	2.08	1.85
Illinois	4.07	3.78	3.37	2.81	3.11	3.06	2.48	2.43
Indiana	NA	3.15	2.87	2.54	2.35	2.32	2.07	2.31
Iowa	4.99	5.39	5.86	6.62	4.74	3.49	2.83	3.05
Kansas	3.61	3.47	3.11	2.88	3.02	2.85	2.38	2.67
Kentucky	NA	3.57	3.62	3.68	3.69	3.30	3.62	3.40
Louisiana	NA	3.01	2.56	2.58	2.63	2.40	2.36	2.44
Maine	4.11	3.79	4.43	4.34	4.53	4.69	3.43	4.26
Maryland	4.69	5.77	6.05	5.81	4.34	4.15	3.15	3.32
Massachusetts	4.52	4.58	4.91	5.29	5.61	2.86	3.26	2.97
Michigan	3.12	2.87	2.63	2.54	2.69	2.60	2.56	2.66
Minnesota	4.26	4.02	2.97	3.92	3.49	2.64	2.41	2.70
Mississippi	NA	NA	NA	NA	2.95	2.43	2.89	2.82
Missouri	NA	5.08	4.79	4.61	5.31	3.95	3.11	2.78
Montana	4.47	3.76	3.96	3.63	3.91	2.28	3.09	2.70
Nebraska	5.76	7.03	5.51	4.96	4.09	3.11	2.28	3.02
Nevada	3.46	4.12	3.99	3.87	3.64	2.72	2.81	2.96
New Hampshire	3.95	NA	4.45	4.28	4.34	3.66	3.15	3.99
New Jersey	4.74	4.22	4.41	4.29	4.21	3.86	3.15	3.99
New Mexico	2.59	2.62	2.18	2.13	2.13	2.04	1.91	1.38
New York	NA	3.42	NA	NA	NA	NA	NA	NA
North Carolina	3.95	4.13	3.96	3.90	3.84	3.83	3.40	3.51
North Dakota	3.73	3.53	3.36	3.14	3.17	2.95	2.50	2.43
Ohio	5.09	4.91	5.51	7.16	6.17	5.96	5.79	5.01
Oklahoma	3.04	2.58	2.66	3.23	2.66	2.22	2.22	3.09
Oregon	2.48	3.12	4.01	3.45	3.00	3.02	1.95	1.92
Pennsylvania	4.60	4.56	4.36	4.03	4.90	4.30	3.48	3.48
Rhode Island	4.53	5.71	6.64	7.53	6.42	4.81	3.46	3.16
South Carolina	4.15	4.03	3.86	3.74	3.78	3.54	3.25	2.95
South Dakota	3.53	4.03	4.26	4.40	4.58	3.75	3.02	2.78
Tennessee	4.33	2.78	2.51	2.71	NA	2.96	2.51	NA
Texas	3.58	3.21	3.11	3.23	3.01	2.50	2.38	3.01
Utah	2.64	2.81	3.02	2.83	2.35	1.93	2.15	2.69
Vermont	2.34	2.29	2.33	2.41	2.58	2.77	2.39	2.26
Virginia	4.83	4.69	4.47	3.94	3.77	5.12	3.28	3.49
Washington	NA	NA	NA	NA	2.28	2.53	2.70	1.89
West Virginia	3.66	3.53	3.89	1.85	3.90	3.02	2.88	2.17
Wisconsin	3.91	4.52	4.75	3.68	NA	3.39	NA	2.89
Wyoming	3.02	3.35	2.90	2.94	2.85	1.64	2.48	3.19
Total	3.93	3.60	3.45	3.61	3.44	3.16	2.94	3.06

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997		1996					
	February	January	Total	December	November	October	September	August
Alabama	4.02	4.44	3.48	4.07	3.61	3.44	3.62	4.11
Alaska	1.80	1.88	1.58	1.59	1.60	1.55	1.57	1.54
Arizona	2.85	4.21	2.78	4.14	3.32	2.66	3.02	3.58
Arkansas	3.16	4.18	2.76	3.68	3.04	2.46	2.29	2.59
California	3.21	4.14	2.59	3.81	3.00	2.37	2.34	2.77
Colorado	NA	NA	2.70	4.91	3.13	2.58	2.49	2.29
Connecticut	6.00	5.82	5.11	6.15	4.60	4.46	4.65	4.42
Delaware	5.09	6.92	3.68	4.96	3.66	2.94	3.03	3.80
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.56	4.61	3.73	4.80	3.90	3.28	3.03	3.54
Georgia	4.15	4.80	3.77	4.65	3.71	3.17	3.31	4.00
Hawaii	7.73	6.16	6.05	6.67	6.30	6.33	6.00	6.05
Idaho	2.13	2.37	2.24	2.30	2.10	2.11	2.72	2.48
Illinois	3.30	3.79	3.27	4.05	3.25	2.65	2.80	3.25
Indiana	3.20	4.08	3.09	3.83	3.16	2.49	2.04	2.70
Iowa	3.66	3.98	3.47	4.09	3.46	3.12	4.28	7.96
Kansas	3.67	4.37	3.05	3.77	3.38	2.91	2.63	2.88
Kentucky	3.47	4.17	3.41	4.40	3.59	2.94	3.16	3.04
Louisiana	3.49	3.84	3.13	4.30	3.24	2.31	2.26	2.69
Maine	3.52	4.96	4.30	4.34	3.64	3.93	3.91	4.35
Maryland	3.75	4.14	4.02	4.65	3.75	3.65	5.61	5.85
Massachusetts	4.12	4.30	3.98	4.82	3.72	3.60	5.36	5.68
Michigan	3.28	3.98	2.90	3.73	3.07	2.49	2.31	2.98
Minnesota	3.48	4.51	3.07	3.78	3.19	2.65	2.91	3.32
Mississippi	3.48	4.25	3.27	4.34	3.14	2.67	2.59	2.89
Missouri	3.50	4.05	3.25	4.03	3.20	3.47	4.14	5.13
Montana	3.50	3.73	3.03	3.46	3.04	3.08	3.24	4.13
Nebraska	3.75	4.42	3.07	3.99	3.11	2.93	2.85	4.83
Nevada	3.37	4.13	3.10	3.97	3.46	2.96	3.26	3.83
New Hampshire	4.42	4.93	4.20	5.01	4.15	3.19	3.86	4.47
New Jersey	4.20	4.70	3.84	4.82	3.83	3.25	3.69	3.71
New Mexico	2.39	3.85	1.99	3.60	2.68	1.88	1.66	2.07
New York	NA	NA	3.36	4.38	3.03	2.86	2.61	2.91
North Carolina	4.34	4.36	3.74	4.26	3.48	3.22	3.68	3.94
North Dakota	3.59	4.22	2.94	3.80	3.10	2.49	2.54	3.44
Ohio	5.41	5.24	4.37	4.79	4.95	5.06	6.12	5.58
Oklahoma	3.68	3.52	2.56	2.84	2.44	1.99	2.53	2.65
Oregon	2.35	2.95	2.42	2.95	2.41	2.24	2.98	3.15
Pennsylvania	4.12	4.22	3.77	4.24	3.92	3.85	4.39	4.86
Rhode Island	4.26	4.85	4.41	5.20	4.04	3.91	5.94	6.51
South Carolina	3.97	4.20	3.90	4.60	3.76	3.26	3.53	3.87
South Dakota	3.95	4.10	3.19	3.98	3.37	2.87	3.40	6.37
Tennessee	3.73	4.10	4.04	6.64	3.71	2.92	3.40	3.70
Texas	4.16	4.70	3.22	4.21	3.49	2.73	2.87	2.97
Utah	2.76	2.65	2.25	2.39	3.32	1.66	2.22	2.08
Vermont	2.16	1.57	2.74	2.67	2.49	2.18	2.36	2.69
Virginia	3.96	5.04	3.89	5.13	3.69	3.34	3.40	4.42
Washington	2.62	3.45	2.44	3.14	2.50	1.94	2.71	3.21
West Virginia	3.54	3.61	3.36	3.53	3.25	3.57	3.74	4.43
Wisconsin	3.54	4.13	3.43	4.12	3.61	3.17	4.11	4.98
Wyoming	3.61	4.22	2.36	2.55	2.18	1.91	2.84	2.92
Total	3.78	4.27	3.34	4.18	3.46	2.94	3.05	3.46

NA = Not Available.

— = Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997		
				February	January	Total	December	November
Alabama	7.26	7.61	6.17	7.10	7.41	8.39	7.32	7.99
Alaska	3.55	3.65	3.31	2.18	3.56	3.78	3.62	3.69
Arizona	7.30	6.71	6.71	7.40	7.23	7.80	7.59	9.17
Arkansas	7.80	6.29	5.25	6.50	9.42	6.64	6.23	6.40
California	6.90	6.27	6.41	6.49	7.28	6.82	7.20	7.49
Colorado	NA	NA	4.08	3.70	NA	NA	3.87	NA
Connecticut	10.35	10.69	9.93	10.33	10.36	NA	9.18	10.42
Delaware	8.07	7.65	6.33	8.08	8.07	8.42	8.11	8.76
District of Columbia	8.73	9.59	8.19	8.44	9.01	9.47	9.45	11.01
Florida	11.56	10.63	9.19	11.61	11.51	12.71	12.58	13.89
Georgia	6.28	6.93	5.48	6.15	6.40	7.45	6.11	5.95
Hawaii	20.22	23.31	18.43	20.46	19.99	21.71	20.40	20.84
Idaho	5.07	4.80	4.99	5.14	5.01	NA	4.98	5.28
Illinois	4.89	6.29	4.39	4.91	4.88	5.95	5.39	5.65
Indiana	NA	5.93	4.74	7.04	NA	NA	NA	5.83
Iowa	5.26	5.75	4.61	4.97	5.49	6.27	6.09	6.52
Kansas	5.81	6.44	5.01	5.80	5.82	6.47	5.96	6.55
Kentucky	5.48	5.93	4.75	5.47	5.48	NA	6.49	6.19
Louisiana	5.88	7.10	5.80	5.60	6.10	NA	6.38	7.96
Maine	7.90	8.35	7.38	7.90	7.90	8.47	8.36	8.21
Maryland	7.37	7.66	6.79	7.36	7.38	8.21	7.61	8.71
Massachusetts	9.22	NA	8.95	9.26	9.19	NA	10.09	9.78
Michigan	4.88	4.99	4.56	4.92	4.85	5.15	4.93	5.08
Minnesota	5.08	6.20	4.91	5.11	5.07	5.79	5.17	6.12
Mississippi	NA	5.90	5.18	5.39	NA	NA	5.67	6.70
Missouri	NA	6.59	5.21	5.86	NA	NA	6.45	6.68
Montana	4.93	4.48	4.60	5.03	4.87	5.07	5.33	5.42
Nebraska	5.12	6.01	4.28	4.93	5.28	5.87	6.19	6.19
Nevada	6.65	5.64	5.70	6.79	6.53	6.29	6.20	6.74
New Hampshire	8.34	9.17	7.17	8.38	8.30	NA	8.46	8.87
New Jersey	7.32	7.58	6.74	7.23	7.41	7.85	7.48	7.63
New Mexico	4.25	5.50	3.86	5.23	3.72	5.75	3.61	4.47
New York	8.74	10.28	8.11	8.67	^R 8.80	^R 10.32	^R 10.22	^R 10.65
North Carolina	8.14	8.76	6.47	7.93	8.33	9.00	8.05	8.23
North Dakota	4.59	4.38	4.37	4.68	4.52	4.93	5.57	5.67
Ohio	6.02	6.77	5.15	5.75	6.25	6.75	6.20	6.31
Oklahoma	5.64	6.13	4.81	5.73	5.56	6.35	5.56	6.17
Oregon	6.24	5.74	5.90	6.44	6.09	6.11	5.89	6.15
Pennsylvania	8.78	7.84	6.52	8.03	9.60	8.33	7.76	7.94
Rhode Island	8.84	8.99	7.55	8.86	8.83	9.61	8.97	9.74
South Carolina	8.22	8.68	7.01	8.27	8.17	8.60	7.98	8.00
South Dakota	5.03	5.32	4.55	5.07	5.01	5.75	5.94	6.17
Tennessee	NA	6.92	5.71	6.31	NA	NA	6.81	6.89
Texas	5.94	6.22	5.03	6.58	5.42	6.41	5.67	6.50
Utah	5.78	4.90	4.24	5.73	5.83	5.10	5.25	5.66
Vermont	6.21	6.04	6.00	6.23	6.19	6.41	6.21	6.43
Virginia	8.08	8.49	7.03	8.05	8.11	8.83	8.42	9.02
Washington	NA	5.39	5.40	5.72	NA	NA	NA	NA
West Virginia	6.51	6.68	6.65	6.51	6.51	6.96	6.54	6.59
Wisconsin	5.97	6.88	5.85	5.98	5.96	6.53	6.37	7.24
Wyoming	NA	3.68	4.14	5.14	NA	4.51	6.52	5.19
Total	6.41	6.76	5.72	6.40	6.42	^R 6.93	^R 6.56	^R 6.85

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	11.10	11.62	11.70	11.26	10.45	8.69	9.21	8.65
Alaska	3.75	3.94	4.66	4.43	4.27	3.88	3.75	3.75
Arizona	11.33	9.10	10.54	10.05	9.59	8.68	7.93	7.03
Arkansas	8.66	9.53	9.25	8.64	8.23	6.93	6.40	6.14
California	7.81	7.42	7.57	7.05	7.71	6.38	6.18	6.42
Colorado	NA	NA	NA	NA	NA	NA	3.92	NA
Connecticut	NA	11.58	11.48	11.35	10.71	10.71	10.07	9.66
Delaware	10.81	11.91	11.94	11.69	10.13	8.93	8.25	7.94
District of Columbia	11.27	11.34	8.40	8.46	8.28	9.18	8.74	8.57
Florida	14.79	14.96	15.05	14.65	14.15	13.36	12.89	12.12
Georgia	8.02	10.57	11.75	11.87	12.38	10.42	6.23	8.88
Hawaii	21.04	21.33	21.61	21.17	21.51	21.78	21.30	22.29
Idaho	5.66	NA	6.51	6.16	5.81	5.26	5.10	4.95
Illinois	6.07	8.00	7.87	7.83	7.93	5.43	5.10	5.28
Indiana	NA	8.77	9.40	10.18	8.85	7.23	6.70	6.28
Iowa	7.80	11.19	10.25	9.53	8.08	6.21	5.24	5.58
Kansas	7.74	8.54	8.27	7.54	8.03	6.24	6.04	5.98
Kentucky	NA	7.94	9.22	9.15	7.56	6.67	6.84	6.32
Louisiana	NA	9.42	8.76	8.41	8.45	7.52	6.09	6.28
Maine	7.80	9.46	9.25	9.69	8.39	7.95	9.05	8.65
Maryland	9.91	10.72	11.35	10.88	9.62	8.26	8.14	7.31
Massachusetts	8.58	10.09	10.39	9.86	8.32	7.49	9.90	9.70
Michigan	5.74	6.81	7.26	6.88	6.15	5.10	4.92	4.82
Minnesota	6.58	7.62	7.17	7.06	6.36	5.32	4.66	4.81
Mississippi	8.29	NA	NA	NA	7.36	6.91	6.42	5.49
Missouri	NA	9.59	9.38	8.77	7.53	5.88	5.31	5.70
Montana	5.84	6.73	6.98	7.46	6.10	5.00	4.73	4.69
Nebraska	7.53	7.90	7.72	7.43	6.71	4.65	4.91	4.86
Nevada	7.67	7.95	7.99	7.58	7.31	6.63	6.16	5.78
New Hampshire	7.47	NA	9.17	9.01	7.59	6.62	6.62	9.36
New Jersey	8.52	9.80	9.82	9.62	9.38	8.30	7.71	7.42
New Mexico	8.32	10.84	11.07	11.66	40.76	6.53	8.78	4.46
New York	^R 11.75	^R 12.64	^R 12.84	^R 12.49	^R 10.88	^R 9.51	^R 9.11	^R 9.73
North Carolina	11.20	13.11	13.15	12.42	10.31	8.58	8.68	9.59
North Dakota	6.26	7.54	7.02	7.05	6.37	5.10	4.10	4.14
Ohio	7.40	8.29	8.46	8.71	7.55	6.74	6.60	6.51
Oklahoma	8.93	9.28	9.36	8.95	8.14	6.80	5.96	5.66
Oregon	6.68	7.88	8.12	7.53	7.21	6.38	6.04	5.85
Pennsylvania	9.01	11.12	11.50	11.78	10.15	8.88	8.41	8.05
Rhode Island	10.64	12.10	12.53	12.30	10.90	9.70	9.67	9.39
South Carolina	9.53	10.15	10.24	9.73	8.96	8.09	8.36	9.24
South Dakota	6.98	9.10	8.07	8.39	7.83	5.92	4.95	4.83
Tennessee	8.33	8.81	9.00	8.92	NA	6.49	6.39	NA
Texas	8.07	8.67	8.91	8.38	7.83	6.42	5.66	5.56
Utah	4.62	5.55	5.94	5.61	5.67	5.80	4.16	5.14
Vermont	7.06	8.41	8.78	8.51	7.35	6.52	6.23	6.08
Virginia	11.07	12.27	12.45	12.40	10.70	9.05	8.12	7.56
Washington	NA	NA	NA	NA	5.82	5.69	5.68	5.48
West Virginia	7.81	8.89	9.58	10.39	8.47	7.26	6.91	6.80
Wisconsin	6.07	6.92	6.99	6.58	6.68	5.13	6.31	5.89
Wyoming	5.54	6.09	6.31	5.83	5.25	3.23	4.73	4.01
Total	^R 7.60	^R 8.65	^R 8.81	^R 8.55	^R 8.21	^R 6.83	^R 6.57	^R 6.53

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1997		1996					
	February	January	Total	December	November	October	September	August
Alabama	7.61	7.62	7.22	7.36	7.83	9.71	10.63	10.98
Alaska	3.67	3.63	3.42	3.32	3.37	3.46	3.77	3.82
Arizona	6.81	6.62	7.52	6.85	7.43	9.28	10.06	10.40
Arkansas	6.09	6.48	5.92	6.64	6.05	7.06	7.75	8.30
California	6.27	6.27	6.44	6.20	6.41	6.67	5.94	6.85
Colorado	NA	NA	4.39	3.94	4.31	4.99	6.38	6.74
Connecticut	10.96	10.41	10.08	10.49	10.26	10.58	10.65	10.69
Delaware	7.75	7.54	7.12	7.59	7.90	9.08	10.58	10.19
District of Columbia	9.36	9.81	9.19	10.22	9.18	10.25	10.78	7.82
Florida	10.69	10.57	10.74	10.47	11.98	13.01	13.39	13.65
Georgia	7.47	6.53	6.69	6.75	5.83	8.51	10.32	10.50
Hawaii	25.55	21.14	19.81	19.51	20.71	20.95	20.47	20.50
Idaho	4.80	4.81	5.20	4.89	5.22	5.60	6.11	6.47
Illinois	6.50	6.15	5.28	5.13	5.05	5.93	8.14	9.26
Indiana	6.06	5.82	5.54	5.65	5.52	6.55	8.37	8.68
Iowa	6.01	5.57	5.49	5.71	5.30	6.66	9.16	12.66
Kansas	6.58	6.33	5.59	5.75	5.47	6.48	7.09	8.27
Kentucky	6.02	5.87	5.54	6.10	5.73	6.62	7.85	8.39
Louisiana	6.85	7.34	6.76	7.30	7.75	8.31	8.41	8.66
Maine	8.66	8.10	7.84	8.53	8.05	7.04	8.23	8.90
Maryland	7.64	7.68	7.60	7.81	7.30	8.45	10.11	10.95
Massachusetts	9.62	NA	8.88	9.53	9.52	7.54	9.30	9.56
Michigan	4.94	5.04	4.96	5.07	5.01	5.58	6.55	7.32
Minnesota	5.81	6.50	5.46	6.18	5.47	5.48	6.67	7.67
Mississippi	5.61	6.17	5.72	6.58	6.28	6.35	6.35	6.40
Missouri	6.50	6.67	5.97	6.02	5.94	7.58	9.53	10.20
Montana	4.49	4.47	4.86	4.59	4.89	5.53	6.18	6.64
Nebraska	5.75	6.21	4.88	5.35	5.01	5.59	6.74	7.02
Nevada	5.76	5.54	6.19	5.69	6.05	7.40	7.91	8.13
New Hampshire	9.24	9.10	7.40	8.41	8.67	7.05	8.26	8.58
New Jersey	7.47	7.67	7.16	7.02	7.29	7.66	8.73	8.72
New Mexico	5.09	5.81	4.47	3.72	3.80	5.80	8.53	7.36
New York	^R 10.13	^R 10.43	8.90	NA	NA	NA	NA	NA
North Carolina	8.76	8.77	7.59	7.90	8.21	9.93	12.45	12.81
North Dakota	4.32	4.43	4.54	4.34	3.84	4.66	6.20	7.43
Ohio	6.83	6.72	5.90	6.29	6.56	7.29	8.41	8.98
Oklahoma	5.79	6.44	5.64	5.32	5.99	8.12	9.14	9.58
Oregon	5.76	5.73	6.31	5.95	6.30	7.01	7.85	8.28
Pennsylvania	8.05	7.64	7.38	7.60	7.80	8.60	10.61	10.70
Rhode Island	9.18	8.79	8.49	8.68	9.36	9.90	11.21	11.29
South Carolina	8.69	8.67	7.41	7.85	7.50	8.21	9.27	9.72
South Dakota	5.09	5.50	5.25	5.39	5.41	5.94	7.62	11.79
Tennessee	7.00	6.84	6.26	6.17	5.93	7.07	8.46	8.77
Texas	6.05	6.35	5.89	6.14	5.34	7.07	7.86	8.37
Utah	4.89	4.91	4.47	4.75	4.81	3.79	4.15	5.19
Vermont	6.04	6.04	6.40	6.19	6.42	7.21	8.41	8.92
Virginia	8.07	8.87	7.94	8.48	8.26	9.78	11.94	12.50
Washington	5.40	5.39	5.65	5.44	5.60	6.09	6.87	7.32
West Virginia	6.67	6.68	7.02	6.80	7.01	7.55	9.22	10.24
Wisconsin	6.61	7.08	6.04	6.87	6.25	5.02	6.01	6.73
Wyoming	3.91	3.51	4.26	3.97	3.75	3.95	5.29	5.68
Total	^R 6.80	^R 6.74	6.34	6.47	6.37	7.05	7.99	8.73

^R = Revised Data.

NA = Not Available.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State,
1996-1998**
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997		
				February	January	Total	December	November
Alabama	6.57	6.94	5.71	6.47	6.65	7.04	6.61	6.83
Alaska	2.18	2.59	2.41	1.23	2.49	2.45	2.55	2.53
Arizona	5.62	5.06	4.96	5.59	5.65	5.33	5.56	5.83
Arkansas	5.16	5.25	4.35	5.19	5.14	5.21	5.12	5.45
California	6.71	7.08	6.47	6.75	6.69	6.48	7.04	7.09
Colorado	NA	NA	3.70	3.34	NA	NA	3.62	NA
Connecticut	7.51	8.26	7.84	7.28	7.73	NA	6.78	7.88
Delaware	6.71	6.43	5.33	6.72	6.70	6.78	6.65	6.97
District of Columbia	7.50	8.11	7.46	7.34	7.65	8.05	8.11	8.78
Florida	7.68	6.70	6.28	7.79	7.58	6.94	7.31	7.41
Georgia	6.01	6.55	5.44	5.86	6.16	6.37	5.66	5.46
Hawaii	14.38	14.90	13.10	14.41	14.35	NA	14.02	NA
Idaho	4.40	4.30	4.44	4.40	4.41	4.47	4.34	4.66
Illinois	4.55	5.80	4.18	4.25	4.76	5.45	5.24	5.28
Indiana	NA	5.27	4.13	5.97	NA	NA	NA	4.92
Iowa	4.43	5.11	4.01	4.08	4.71	5.23	5.20	5.53
Kansas	5.44	6.18	4.43	5.43	5.44	NA	NA	6.00
Kentucky	5.46	5.69	4.51	5.63	5.32	NA	5.92	6.03
Louisiana	5.51	6.78	5.71	5.24	5.73	6.28	5.94	7.10
Maine	7.41	7.91	6.90	7.41	7.41	7.70	7.79	7.62
Maryland	6.16	6.66	5.96	6.18	6.14	6.47	6.35	7.11
Massachusetts	7.43	8.13	7.48	7.47	7.39	7.31	8.03	7.74
Michigan	4.77	4.90	4.49	4.76	4.77	4.92	4.79	4.95
Minnesota	4.47	5.65	4.41	4.42	4.50	4.85	4.40	5.26
Mississippi	NA	5.40	4.76	4.35	NA	NA	5.08	5.58
Missouri	NA	6.52	5.08	5.63	NA	NA	6.16	6.01
Montana	4.90	4.46	4.53	4.97	4.85	4.69	5.24	3.81
Nebraska	4.56	5.59	4.35	4.44	4.66	4.86	5.34	5.40
Nevada	5.69	4.91	4.82	5.76	5.63	5.13	5.36	5.47
New Hampshire	7.59	8.61	6.80	7.57	7.60	NA	7.79	7.83
New Jersey	4.50	6.90	7.51	4.13	4.85	5.87	4.93	5.30
New Mexico	3.93	4.88	3.32	4.35	3.66	4.45	3.59	3.90
New York	6.25	7.82	NA	6.29	^R 6.22	^R 6.70	^R 6.76	^R 7.01
North Carolina	6.89	7.60	5.75	6.72	7.05	6.99	6.96	6.70
North Dakota	4.07	4.17	3.99	4.13	4.03	4.34	4.92	5.11
Ohio	5.71	6.59	4.87	5.43	5.96	6.31	5.94	6.05
Oklahoma	5.54	6.09	4.50	5.56	5.53	5.50	5.37	5.32
Oregon	5.03	4.56	4.81	5.17	4.92	4.64	4.67	4.74
Pennsylvania	7.25	7.29	5.84	7.36	7.14	7.36	6.90	6.89
Rhode Island	7.76	8.04	7.11	7.78	7.75	8.21	7.98	8.02
South Carolina	6.92	7.50	6.43	6.91	6.92	6.47	6.84	6.75
South Dakota	4.11	4.46	3.78	4.10	4.12	4.71	5.06	5.22
Tennessee	NA	6.35	5.50	6.37	NA	NA	6.29	6.12
Texas	4.99	5.69	4.33	5.37	4.66	^R 5.00	^R 5.12	^R 5.41
Utah	4.45	3.78	3.32	4.35	4.54	3.91	4.39	4.65
Vermont	5.22	5.23	5.26	5.23	5.21	5.18	5.15	4.99
Virginia	6.37	6.80	5.73	6.33	6.41	6.49	6.53	6.42
Washington	NA	4.68	4.75	4.81	NA	NA	NA	NA
West Virginia	6.27	6.11	6.02	6.26	6.28	6.42	6.20	6.30
Wisconsin	5.05	5.91	4.77	4.96	5.12	5.41	5.52	6.04
Wyoming	NA	3.47	3.92	4.56	NA	NA	5.56	4.62
Total	5.56	6.13	5.27	5.56	5.56	^R5.77	^R5.69	^R5.84

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	7.46	7.59	7.50	7.60	7.22	6.85	7.11	7.26
Alaska	2.52	2.28	2.09	2.24	2.15	2.23	2.37	2.53
Arizona	5.83	5.82	5.34	5.22	5.21	5.19	5.09	5.27
Arkansas	5.75	5.54	5.18	5.32	5.37	5.14	4.90	4.86
California	6.70	5.88	5.00	5.90	6.32	5.33	6.10	6.71
Colorado	NA	NA	NA	NA	NA	NA	3.29	NA
Connecticut	NA	6.59	5.22	5.90	6.35	7.00	7.24	7.66
Delaware	7.56	7.28	8.64	7.91	7.39	6.82	6.61	6.47
District of Columbia	8.08	8.11	7.20	6.92	7.03	6.87	10.06	7.61
Florida	7.13	6.94	6.62	6.98	6.93	6.89	6.74	6.96
Georgia	5.98	6.28	7.00	7.60	7.68	6.30	5.57	7.53
Hawaii	14.75	14.62	15.09	15.07	15.37	15.25	15.34	15.72
Idaho	4.73	4.73	4.83	4.76	4.78	4.66	4.62	4.36
Illinois	5.82	6.24	6.10	5.68	5.55	4.93	4.64	4.97
Indiana	4.93	6.05	6.07	6.50	6.28	6.15	5.97	5.37
Iowa	5.97	7.44	6.44	5.68	6.05	4.88	4.34	4.81
Kansas	5.92	5.66	4.90	4.95	4.90	5.25	5.17	5.46
Kentucky	NA	5.90	5.95	6.20	6.00	5.53	5.85	5.72
Louisiana	7.30	6.20	5.94	5.39	6.19	6.08	5.08	5.78
Maine	6.84	7.61	7.16	7.12	6.94	6.67	8.28	8.10
Maryland	7.18	6.89	6.22	6.16	6.52	6.05	5.76	6.11
Massachusetts	5.63	5.45	5.53	5.34	5.04	5.44	7.94	8.14
Michigan	5.40	5.97	5.96	5.81	5.44	4.82	4.63	4.71
Minnesota	5.09	4.99	4.41	4.44	4.50	3.99	3.89	4.16
Mississippi	5.98	NA	NA	NA	4.79	5.08	4.93	4.61
Missouri	NA	5.70	5.19	5.11	4.86	4.39	4.55	5.07
Montana	5.39	4.39	5.73	5.62	5.39	4.81	4.52	4.57
Nebraska	5.26	4.33	3.76	3.56	5.88	5.00	3.91	4.23
Nevada	5.48	5.22	5.22	5.11	5.07	5.12	5.18	4.95
New Hampshire	6.15	NA	6.47	6.49	6.20	5.86	6.52	8.67
New Jersey	4.91	4.27	4.43	4.32	4.38	5.77	5.57	6.99
New Mexico	4.67	5.12	5.35	5.47	7.67	4.23	4.63	3.54
New York	^R 14.75	^R 5.35	^R 4.78	^R 4.22	^R 4.99	^R 5.84	^R 6.20	^R 6.85
North Carolina	6.18	6.46	6.44	6.44	5.99	6.02	6.50	7.85
North Dakota	4.97	5.15	4.51	4.96	4.54	4.25	3.66	3.65
Ohio	6.22	6.54	6.82	6.76	7.39	6.08	6.18	6.03
Oklahoma	5.54	5.02	4.94	4.93	5.15	4.97	4.81	5.26
Oregon	4.66	4.82	4.89	4.76	4.79	4.62	4.61	4.57
Pennsylvania	7.26	7.68	7.92	8.12	8.13	7.99	7.70	7.37
Rhode Island	8.00	8.77	9.12	8.96	8.77	8.07	8.46	8.17
South Carolina	6.10	3.26	6.03	5.90	5.92	5.92	6.74	7.20
South Dakota	5.50	6.51	5.22	5.44	6.09	4.77	4.04	3.96
Tennessee	6.09	6.07	5.81	5.91	NA	5.39	5.01	NA
Texas	4.76	4.84	4.40	4.51	4.80	4.60	4.29	4.42
Utah	3.78	3.99	4.02	3.82	3.60	3.37	3.09	3.81
Vermont	4.91	5.01	5.43	5.42	5.41	5.58	5.10	5.15
Virginia	6.56	6.60	6.58	6.68	6.10	6.31	6.29	5.93
Washington	NA	NA	NA	NA	4.66	4.83	4.21	4.71
West Virginia	7.01	7.63	8.23	8.53	7.78	6.81	6.42	6.22
Wisconsin	4.88	4.85	4.71	4.30	4.74	3.83	5.07	5.03
Wyoming	5.02	NA	4.31	4.11	3.93	2.65	3.59	3.46
Total	^R 5.94	^R 5.54	^R 5.32	^R 5.28	^R 5.56	^R 5.36	^R 5.46	^R 5.72

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997		1996					
	February	January	Total	December	November	October	September	August
Alabama	6.92	6.97	6.19	6.52	6.31	6.60	6.81	6.88
Alaska	2.52	2.63	2.32	2.39	2.34	2.23	2.02	2.03
Arizona	5.11	5.01	5.01	4.99	5.02	5.16	5.19	5.15
Arkansas	5.07	5.42	4.68	5.59	5.02	4.72	4.67	4.86
California	6.98	7.18	5.94	6.36	5.49	5.68	5.46	5.25
Colorado	NA	NA	3.67	3.32	3.41	3.69	3.93	4.03
Connecticut	8.45	8.09	7.41	7.90	7.84	6.19	5.95	5.70
Delaware	6.54	6.33	5.82	6.19	5.96	6.39	6.45	6.88
District of Columbia	7.97	8.24	7.37	8.01	8.02	7.93	7.35	5.87
Florida	6.84	6.56	6.45	6.47	6.43	6.41	6.38	6.39
Georgia	6.66	6.44	5.89	6.33	5.72	6.08	5.94	5.95
Hawaii	15.07	14.72	14.40	15.13	15.31	15.35	14.62	14.94
Idaho	4.29	4.30	4.56	4.34	4.63	4.86	4.91	4.92
Illinois	5.68	5.89	4.92	5.20	4.83	5.23	6.25	7.66
Indiana	5.43	5.14	4.67	4.98	4.66	5.01	5.97	5.87
Iowa	5.32	4.96	4.59	5.16	5.09	5.32	5.62	8.72
Kansas	6.25	6.12	4.61	4.90	4.56	4.69	5.44	5.98
Kentucky	5.80	5.61	5.09	5.67	5.50	5.80	5.95	6.34
Louisiana	6.48	7.08	6.08	6.87	6.58	6.15	5.90	6.11
Maine	8.12	7.75	7.09	7.87	7.58	6.17	6.55	6.57
Maryland	6.72	6.60	6.07	6.61	5.69	5.88	6.27	6.51
Massachusetts	8.28	7.97	6.74	7.91	7.30	4.79	4.88	4.87
Michigan	4.80	4.99	4.75	4.97	4.85	5.24	5.52	6.09
Minnesota	5.23	6.02	4.63	5.66	4.61	3.99	4.26	4.95
Mississippi	5.17	5.61	5.22	5.73	4.86	4.31	4.25	4.14
Missouri	6.47	6.58	5.35	5.83	5.32	5.36	5.94	6.37
Montana	4.45	4.46	4.64	4.49	4.68	5.07	5.27	5.32
Nebraska	5.24	5.91	4.47	5.38	4.03	4.93	3.35	4.37
Nevada	4.86	4.97	4.90	4.88	4.89	5.13	5.14	5.10
New Hampshire	8.81	8.41	6.74	7.75	7.78	5.86	6.14	6.23
New Jersey	7.10	6.73	6.14	6.31	5.71	4.61	4.50	4.47
New Mexico	4.37	5.36	3.35	3.34	3.20	3.48	4.17	3.37
New York	^R 7.53	^R 8.13	6.88	NA	NA	NA	NA	NA
North Carolina	7.67	7.52	6.18	6.78	6.67	6.35	6.38	6.37
North Dakota	4.09	4.24	3.91	4.06	3.06	3.15	3.77	4.98
Ohio	6.74	6.45	5.38	5.82	6.15	6.43	6.67	6.88
Oklahoma	5.75	6.40	4.70	5.04	4.80	5.06	5.03	5.12
Oregon	4.55	4.56	4.85	4.65	4.82	5.09	5.11	5.09
Pennsylvania	7.55	7.07	6.44	6.86	6.61	7.00	7.53	7.26
Rhode Island	8.20	7.88	7.50	7.89	7.78	8.23	7.95	7.95
South Carolina	7.54	7.46	6.26	7.01	6.37	5.66	5.76	5.74
South Dakota	4.28	4.61	4.20	4.34	4.20	4.07	5.15	8.54
Tennessee	6.19	6.51	5.72	5.78	5.32	5.50	6.05	6.33
Texas	5.28	6.00	4.27	5.38	4.58	4.24	4.33	3.89
Utah	3.75	3.81	3.38	3.69	3.80	2.96	3.07	3.32
Vermont	5.21	5.24	5.24	5.20	5.11	5.11	5.19	5.44
Virginia	6.61	6.97	5.93	6.74	5.94	6.08	6.47	6.65
Washington	4.72	4.65	4.80	4.76	4.79	4.88	5.03	5.10
West Virginia	6.13	6.09	6.03	5.85	6.26	5.82	6.27	4.85
Wisconsin	5.60	6.14	4.83	5.73	4.99	3.72	4.08	4.66
Wyoming	3.53	3.41	3.68	3.08	2.60	3.73	4.06	3.90
Total	^R 6.10	^R 6.15	5.40	5.78	5.40	5.33	5.46	5.56

^R = Revised Data.

NA = Not Available.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		1997		
				February	January	Total	December	November
Alabama	3.49	4.23	3.89	3.50	3.47	3.46	3.57	3.62
Alaska	1.54	1.56	1.45	1.52	1.56	1.54	1.56	1.55
Arizona	3.63	4.01	3.86	3.76	3.53	3.56	3.37	3.20
Arkansas	3.70	4.13	3.13	3.62	3.77	3.70	3.98	4.28
California	4.91	5.41	4.08	5.34	4.55	4.07	4.45	4.63
Colorado	NA	NA	0.88	2.58	NA	NA	2.74	NA
Connecticut	5.13	5.94	6.04	5.13	5.12	4.72	4.81	4.96
Delaware	4.15	5.15	3.91	4.08	4.22	4.32	4.60	4.69
District of Columbia	—	—	—	—	—	—	—	—
Florida	7.26	4.68	4.28	7.88	6.75	NA	4.94	5.21
Georgia	5.50	5.99	4.61	5.37	5.63	5.18	4.61	5.04
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	3.04	2.77	3.04	3.02	3.06	2.73	2.77	2.74
Illinois	4.18	6.24	3.73	4.12	4.22	4.71	4.92	5.69
Indiana	NA	4.20	3.32	4.84	NA	NA	NA	3.48
Iowa	2.98	4.26	3.29	2.42	3.43	4.12	4.56	4.55
Kansas	4.67	3.87	3.20	3.67	5.52	NA	NA	4.15
Kentucky	4.55	4.73	3.85	4.51	4.59	NA	5.01	5.39
Louisiana	2.88	3.87	3.06	2.86	2.90	2.96	3.12	3.52
Maine	6.02	7.02	5.94	6.02	6.02	5.55	7.19	5.88
Maryland	4.94	NA	4.88	4.82	5.42	NA	5.49	5.32
Massachusetts	6.75	7.94	6.75	6.70	6.79	^R 5.97	7.02	6.63
Michigan	4.00	4.09	4.00	4.11	3.90	4.19	4.19	4.24
Minnesota	3.13	4.14	2.93	3.00	3.25	3.24	3.24	3.86
Mississippi	NA	4.14	3.56	3.22	NA	NA	3.53	4.04
Missouri	NA	5.64	4.44	4.69	NA	NA	5.36	5.04
Montana	4.83	4.79	4.83	4.85	4.82	4.87	4.93	4.88
Nebraska	3.29	4.64	3.19	3.27	3.30	3.73	3.97	4.32
Nevada	5.98	6.33	4.96	6.06	5.90	7.27	8.10	9.69
New Hampshire	6.39	7.96	5.55	5.84	7.08	NA	7.42	6.53
New Jersey	3.57	4.97	4.58	3.42	3.71	3.83	4.33	4.41
New Mexico	3.25	3.16	2.70	5.84	2.16	3.12	2.38	2.96
New York	5.41	5.82	5.50	5.27	^R 5.54	^R 4.50	^R 5.42	^R 5.48
North Carolina	4.68	5.56	4.67	4.41	4.95	4.65	5.10	5.05
North Dakota	3.12	4.71	3.34	3.01	3.22	3.23	3.43	3.85
Ohio	5.35	6.12	3.96	5.06	5.62	5.70	5.60	5.54
Oklahoma	4.14	4.93	3.03	4.18	4.10	4.05	4.26	4.37
Oregon	3.70	3.25	3.19	3.73	3.67	3.17	3.36	3.21
Pennsylvania	4.68	5.25	4.60	4.55	4.80	^R 4.73	4.56	4.59
Rhode Island	4.43	5.57	5.02	4.25	4.59	4.33	5.04	4.59
South Carolina	3.53	4.49	4.33	3.38	3.67	3.45	3.95	4.26
South Dakota	3.28	4.53	3.36	3.25	3.30	4.01	3.71	4.36
Tennessee	NA	4.77	3.89	3.98	NA	NA	4.47	4.17
Texas	2.59	3.71	2.54	2.52	2.66	NA	2.80	3.51
Utah	3.13	2.49	2.08	3.19	3.06	2.62	3.11	2.98
Vermont	3.03	3.23	3.56	3.01	3.06	3.07	3.11	3.12
Virginia	4.89	4.22	4.29	4.99	4.81	3.98	4.27	3.97
Washington	NA	3.96	2.50	2.81	NA	NA	NA	NA
West Virginia	2.78	3.24	2.71	2.75	2.81	2.87	2.75	2.68
Wisconsin	4.08	4.77	3.48	4.48	3.79	4.12	4.53	5.05
Wyoming	NA	3.41	2.96	4.29	NA	NA	3.55	3.55
Total	3.63	4.43	3.61	3.60	^R3.66	^R3.53	3.78	4.07

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	3.66	3.21	3.21	3.08	3.20	3.19	2.96	3.15
Alaska	1.54	1.57	1.56	1.56	1.48	1.44	1.53	1.55
Arizona	3.68	3.26	3.10	3.16	3.90	3.90	4.31	4.06
Arkansas	3.87	3.58	3.57	3.42	3.37	3.17	3.19	3.31
California	4.28	3.50	3.42	3.79	4.00	2.51	3.45	4.24
Colorado	NA	NA	NA	NA	NA	NA	2.17	NA
Connecticut	4.29	4.07	3.86	3.93	4.02	4.22	4.46	4.91
Delaware	4.55	4.06	4.07	4.04	3.99	3.62	3.62	4.35
District of Columbia	—	—	—	—	—	—	—	—
Florida	5.02	NA	4.64	4.32	4.40	4.34	4.41	4.42
Georgia	4.80	6.43	4.68	4.81	6.14	4.67	4.39	5.07
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	2.72	2.69	2.68	2.80	2.52	2.73	2.75	2.75
Illinois	4.57	3.83	4.48	4.15	3.16	3.00	4.10	4.80
Indiana	3.57	4.07	3.95	3.91	4.38	4.50	4.67	4.41
Iowa	4.42	3.90	3.52	4.11	3.37	3.96	3.14	4.04
Kansas	4.20	3.44	3.10	3.01	3.03	2.57	2.32	2.34
Kentucky	NA	3.99	3.87	3.90	3.61	3.73	3.82	3.97
Louisiana	3.54	2.86	2.49	2.76	2.71	2.39	2.34	2.09
Maine	4.68	4.65	4.43	4.40	4.45	4.10	5.77	7.08
Maryland	4.36	4.87	4.49	5.38	4.67	4.71	20.15	5.67
Massachusetts	4.54	4.19	4.02	4.19	3.73	4.63	6.35	7.12
Michigan	4.51	4.16	4.53	4.60	4.41	4.24	4.12	4.15
Minnesota	3.80	3.06	2.74	2.58	2.72	2.67	2.58	2.74
Mississippi	3.86	NA	NA	NA	3.21	3.06	2.98	2.93
Missouri	NA	3.89	3.88	3.81	3.81	3.45	3.78	4.48
Montana	4.99	4.98	4.98	4.96	4.88	4.85	4.84	4.84
Nebraska	4.15	3.48	3.38	3.09	3.02	2.77	2.66	3.19
Nevada	11.58	9.23	7.42	7.08	7.50	7.77	5.80	4.67
New Hampshire	4.54	NA	3.46	3.42	3.62	3.12	4.02	6.10
New Jersey	3.79	3.31	2.72	3.35	3.32	3.09	2.87	4.82
New Mexico	3.56	3.24	3.02	2.92	3.71	2.96	5.10	3.40
New York	^R 4.95	^R 3.88	^R 4.20	^R 1.56	^R 4.32	^R 4.49	^R 4.58	^R 5.22
North Carolina	4.13	4.30	2.83	4.00	3.64	4.01	4.14	4.80
North Dakota	4.07	3.35	3.66	3.14	3.02	2.42	2.37	1.60
Ohio	4.99	5.55	5.38	4.42	6.96	4.50	5.96	5.49
Oklahoma	4.10	3.44	3.33	3.34	3.32	2.75	3.08	3.90
Oregon	3.04	3.03	2.96	3.15	3.10	3.15	3.16	3.25
Pennsylvania	4.46	4.21	4.14	^R 4.59	4.70	4.48	4.73	4.91
Rhode Island	4.28	4.08	3.66	3.78	3.74	4.72	3.56	4.50
South Carolina	3.97	3.23	3.25	1.89	3.32	3.26	3.21	3.43
South Dakota	4.64	4.16	3.96	4.49	4.08	3.55	3.12	3.00
Tennessee	4.16	3.89	3.44	3.09	NA	3.19	3.40	NA
Texas	3.29	NA	2.34	2.41	2.46	2.31	2.03	2.08
Utah	2.81	2.61	2.81	2.70	2.27	2.27	2.31	2.53
Vermont	2.97	3.00	2.96	2.97	3.01	3.05	2.98	3.10
Virginia	3.44	3.98	3.95	3.82	3.88	4.03	3.11	4.79
Washington	NA	NA	NA	NA	2.81	2.94	2.75	2.88
West Virginia	2.89	2.93	2.84	2.91	2.72	2.81	2.49	2.78
Wisconsin	4.19	3.54	3.24	3.20	3.28	2.98	3.89	3.55
Wyoming	NA	NA	3.34	3.38	3.35	3.24	3.40	3.40
Total	3.66	3.21	2.92	^R 2.86	^R 3.07	2.92	^R 2.99	3.36

See footnotes at end of table.

**Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State,
1996-1998**

(Dollars per Thousand Cubic Feet) — Continued

State	1997		1996					
	February	January	Total	December	November	October	September	August
Alabama	3.91	4.57	3.64	4.61	3.72	3.14	2.94	3.50
Alaska	1.57	1.55	1.41	1.35	1.35	1.35	1.35	1.45
Arizona	3.74	4.32	3.80	3.81	3.80	3.78	3.76	3.68
Arkansas	3.78	4.45	3.28	4.33	3.72	3.00	3.07	3.09
California	5.32	5.49	3.77	4.40	4.01	3.32	3.57	3.55
Colorado	NA	NA	2.91	1.01	0.94	2.13	0.46	0.27
Connecticut	5.76	6.11	4.80	5.81	4.95	4.00	3.98	3.83
Delaware	5.03	5.29	4.32	5.00	4.62	4.62	4.58	4.71
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.68	4.69	4.21	4.52	4.29	3.96	3.87	4.08
Georgia	5.63	6.40	4.40	4.87	3.76	4.16	2.73	4.08
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	2.76	2.78	2.78	2.42	2.51	2.76	2.75	2.74
Illinois	5.86	6.49	4.12	4.15	4.09	4.17	5.04	4.98
Indiana	4.21	4.19	3.62	4.16	3.52	3.52	3.91	3.99
Iowa	4.73	3.94	3.63	3.96	3.82	3.46	3.95	3.57
Kansas	3.45	4.33	3.09	4.85	3.37	2.44	3.04	3.21
Kentucky	4.67	4.78	3.87	4.64	3.92	3.73	3.65	3.97
Louisiana	3.49	4.19	2.84	4.07	3.05	2.22	2.08	2.36
Maine	7.10	6.95	5.22	6.60	6.56	4.04	3.96	3.96
Maryland	NA	5.31	5.36	4.63	6.00	7.80	6.18	7.39
Massachusetts	8.35	^R 7.49	5.37	6.98	5.52	4.15	3.75	3.71
Michigan	4.02	4.16	3.87	4.06	3.97	3.74	3.30	3.47
Minnesota	3.73	4.69	2.97	4.18	3.09	2.12	2.35	2.99
Mississippi	3.80	4.45	3.43	4.47	3.59	2.87	2.85	3.20
Missouri	5.94	5.35	4.35	4.84	4.02	3.75	4.12	4.27
Montana	4.80	4.79	4.88	4.87	4.95	5.02	5.04	5.16
Nebraska	4.14	5.13	3.29	4.30	3.62	2.71	2.86	3.42
Nevada	4.64	9.50	4.90	4.67	4.68	5.01	5.10	5.15
New Hampshire	7.97	7.94	4.79	6.84	5.13	7.64	3.48	3.34
New Jersey	5.03	4.92	3.82	4.62	3.70	3.05	3.01	3.29
New Mexico	4.02	3.01	2.90	2.63	2.78	2.98	3.57	3.44
New York	^R 5.72	^R 5.93	5.04	5.17	4.79	4.45	4.16	4.66
North Carolina	5.41	5.63	4.37	5.14	4.65	4.05	4.03	3.82
North Dakota	4.94	4.39	3.02	3.89	2.36	2.28	2.77	2.99
Ohio	6.71	5.77	4.10	2.79	5.14	4.84	4.51	4.75
Oklahoma	4.53	5.41	3.26	3.87	3.33	3.28	3.57	3.30
Oregon	3.24	3.25	3.24	3.29	3.36	3.52	3.17	3.21
Pennsylvania	5.25	5.25	4.12	3.87	4.15	3.97	3.94	3.90
Rhode Island	5.52	5.64	4.67	9.64	4.62	3.70	3.84	3.82
South Carolina	4.22	4.74	3.77	4.58	4.03	3.29	3.30	3.43
South Dakota	4.00	4.99	3.50	6.16	4.81	4.73	5.36	5.26
Tennessee	4.75	4.80	3.92	4.52	3.95	3.52	3.80	4.11
Texas	3.19	4.10	2.58	3.82	2.89	2.06	2.11	2.53
Utah	2.53	2.44	2.10	2.28	2.22	1.97	2.00	2.03
Vermont	3.14	3.32	3.44	3.18	3.20	3.44	3.17	3.31
Virginia	5.51	3.56	4.07	3.91	3.53	4.14	4.10	4.32
Washington	3.58	4.36	2.67	3.81	2.78	2.52	1.93	3.84
West Virginia	3.03	3.44	2.76	2.96	3.06	2.70	2.78	2.41
Wisconsin	4.41	5.06	3.48	4.79	4.10	2.67	2.74	3.05
Wyoming	3.41	3.40	3.14	3.25	3.32	3.29	3.19	3.15
Total	4.20	^R 4.62	3.42	4.20	3.57	2.89	2.77	3.05

^R = Revised Data.

NA = Not Available.

— = Not Applicable.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers,
by State, 1996-1998**
(Dollars per Thousand Cubic Feet)

State	1998	1997						
	January	Total	December	November	October	September	August	July
Alabama	2.86	2.76	2.90	3.70	3.75	2.88	2.56	2.51
Alaska	1.85	1.74	1.84	1.84	1.85	1.88	1.69	1.87
Arizona	2.84	2.99	2.86	4.00	3.11	3.37	2.63	2.20
Arkansas	2.25	2.60	2.24	3.12	3.12	2.89	2.64	2.38
California	2.94	3.07	2.96	3.64	3.40	3.14	2.81	2.69
Colorado	3.01	3.21	2.93	3.90	2.37	2.42	2.77	4.07
Connecticut	2.74	2.55	2.74	3.38	2.76	2.37	2.35	2.33
Delaware	5.34	3.15	4.28	2.58	5.69	3.40	3.00	2.83
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.25	3.20	3.19	4.06	4.05	3.41	2.97	2.94
Georgia	2.35	2.76	4.97	3.33	3.94	3.07	2.27	2.75
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.25	2.54	2.48	3.31	3.13	2.82	2.39	2.31
Indiana	3.84	3.27	3.67	4.03	5.25	3.67	3.39	2.77
Iowa	3.36	3.27	2.99	4.16	3.81	3.28	3.12	2.70
Kansas	3.35	2.48	3.33	3.02	3.05	2.70	2.13	2.06
Kentucky	3.46	3.34	3.47	4.24	4.00	3.25	2.92	2.87
Louisiana	2.61	2.80	2.86	3.61	3.40	3.03	2.60	2.44
Maine	—	—	—	—	—	—	—	—
Maryland	3.75	2.97	3.61	4.10	3.91	3.42	2.89	2.35
Massachusetts	3.16	3.11	3.57	4.08	4.08	3.21	2.87	2.81
Michigan	0.51	0.79	0.47	1.08	1.59	0.73	0.58	0.96
Minnesota	2.63	2.54	2.99	3.72	3.67	3.56	2.43	2.43
Mississippi	2.48	2.75	2.80	3.51	3.35	3.02	2.61	2.46
Missouri	2.63	2.67	2.77	3.52	3.35	2.94	2.51	2.39
Montana	4.61	7.62	4.18	6.84	2.98	64.31	1.92	1.37
Nebraska	2.72	2.58	4.94	4.29	3.21	2.98	2.49	2.32
Nevada	2.41	2.17	2.16	2.80	2.64	2.39	2.02	1.98
New Hampshire	—	2.71	—	—	—	2.85	2.55	2.74
New Jersey	2.98	3.07	3.20	4.19	4.23	3.42	2.87	2.80
New Mexico	2.43	2.64	2.55	3.02	3.05	2.82	2.47	2.46
New York	3.00	2.89	3.38	3.83	3.39	2.89	2.60	2.58
North Carolina	3.02	3.16	3.60	4.95	3.68	3.38	3.09	3.12
North Dakota	—	3.81	—	—	—	—	—	4.00
Ohio	3.32	3.66	4.13	4.12	4.00	4.35	4.28	3.10
Oklahoma	4.47	2.97	2.89	4.05	3.46	3.20	2.48	2.37
Oregon	1.14	1.48	1.48	1.44	1.45	1.49	1.49	1.35
Pennsylvania	2.79	2.86	3.16	3.69	3.65	2.99	2.81	2.54
Rhode Island	3.48	3.39	3.78	4.05	4.02	3.32	3.04	2.98
South Carolina	4.05	4.15	4.46	4.00	4.10	4.54	4.54	4.35
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.49	2.70	2.74	3.33	3.15	2.85	2.50	2.39
Utah	—	2.11	—	—	2.00	2.66	1.79	1.86
Vermont	3.02	3.27	3.42	4.21	3.96	—	2.90	2.95
Virginia	3.05	2.99	2.54	4.09	4.73	3.77	2.95	2.58
Washington	1.64	5.54	5.73	5.16	4.21	8.62	0.67	4.83
West Virginia	5.59	3.87	3.31	3.00	3.29	3.41	3.71	3.79
Wisconsin	2.90	3.04	2.92	4.11	3.94	3.09	2.85	3.12
Wyoming	5.39	9.31	1.63	3.43	4.88	7.74	34.13	20.44
Total	2.64	2.81	2.85	3.48	3.30	2.99	2.58	2.49

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997						1996	
	June	May	April	March	February	January	Total	December
Alabama	2.65	2.44	3.21	2.12	2.04	4.37	2.95	4.32
Alaska	1.79	1.64	1.63	1.55	1.69	1.68	1.45	1.64
Arizona	3.03	3.11	4.47	2.85	4.01	5.70	3.03	7.53
Arkansas	2.40	1.92	1.98	1.60	1.92	4.18	2.52	3.88
California	2.75	2.60	2.63	3.04	4.14	4.67	2.75	4.55
Colorado	2.31	6.20	2.47	2.26	3.32	3.76	2.09	4.30
Connecticut	2.26	2.22	2.22	2.45	3.08	3.97	2.76	4.97
Delaware	1.95	3.68	2.53	2.61	2.90	4.87	3.13	4.06
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.03	2.87	2.58	2.62	3.80	5.18	3.12	4.75
Georgia	3.13	2.64	2.64	3.34	8.15	2.08	2.88	6.28
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.37	2.29	2.12	2.00	2.93	3.34	2.62	3.82
Indiana	2.99	3.06	2.88	2.74	3.74	5.04	3.48	4.80
Iowa	3.28	2.89	2.79	2.73	3.74	5.11	3.23	3.77
Kansas	2.11	2.14	2.00	1.80	2.92	4.56	2.25	4.10
Kentucky	2.96	2.83	3.13	3.20	3.69	4.85	3.49	4.64
Louisiana	2.65	2.45	2.18	2.10	2.93	4.35	2.94	4.37
Maine	—	—	—	—	—	—	—	—
Maryland	2.69	2.98	3.14	4.18	5.75	5.04	3.11	5.92
Massachusetts	2.92	2.84	2.54	2.64	3.29	5.37	3.07	4.85
Michigan	0.84	0.42	0.61	0.69	0.59	0.56	0.74	0.55
Minnesota	2.34	2.30	2.34	2.17	3.35	2.26	2.18	2.32
Mississippi	2.52	2.37	2.27	2.08	2.61	4.15	2.78	4.27
Missouri	2.44	2.74	2.77	2.26	4.62	5.41	2.58	4.90
Montana	9.35	13.57	2.87	4.08	9.68	3.54	2.89	1.81
Nebraska	2.00	1.89	1.89	2.29	3.20	3.22	2.07	4.37
Nevada	2.09	1.99	2.02	2.05	2.33	2.14	2.12	2.19
New Hampshire	2.72	2.68	—	—	—	—	—	—
New Jersey	2.85	2.76	2.69	2.57	3.60	4.65	2.96	4.39
New Mexico	2.38	2.39	2.07	2.01	2.85	4.07	2.31	3.80
New York	2.65	2.62	2.53	2.56	3.35	4.36	2.96	4.22
North Carolina	2.87	2.64	2.79	—	—	6.89	3.11	4.41
North Dakota	—	4.14	3.98	2.93	—	—	2.93	2.81
Ohio	3.20	4.13	4.06	4.03	4.16	3.87	3.44	4.27
Oklahoma	2.63	2.91	2.57	2.88	4.36	4.21	2.98	4.43
Oregon	1.57	—	—	1.40	—	1.96	1.33	2.01
Pennsylvania	3.04	2.57	2.31	2.72	2.91	4.65	2.85	4.57
Rhode Island	3.21	3.09	2.82	2.90	4.09	3.18	2.29	3.14
South Carolina	3.51	3.84	3.87	2.84	4.22	6.95	4.56	5.08
South Dakota	—	—	—	—	—	—	2.36	—
Tennessee	—	—	—	—	—	—	2.61	—
Texas	2.46	2.34	2.14	2.12	2.85	3.89	2.51	3.80
Utah	4.82	—	—	—	—	—	1.83	—
Vermont	—	2.83	2.27	2.61	3.60	5.05	3.22	4.42
Virginia	2.93	3.05	2.71	2.76	1.80	3.13	2.98	3.42
Washington	3.83	7.21	5.93	65.04	4.50	5.11	4.98	4.75
West Virginia	3.23	3.22	3.63	3.82	7.68	3.15	2.99	2.94
Wisconsin	2.81	2.58	2.46	2.33	3.42	4.74	3.04	4.29
Wyoming	4.00	11.82	24.02	22.85	2.47	13.99	12.59	26.41
Total	2.59	2.51	2.34	2.39	3.18	4.08	2.69	3.98

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1996							
	November	October	September	August	July	June	May	April
Alabama	3.16	2.27	2.14	2.66	3.04	2.71	2.59	3.10
Alaska	1.63	1.73	1.71	1.66	1.58	1.47	1.04	1.16
Arizona	4.76	2.53	2.98	2.61	3.09	3.33	4.43	2.30
Arkansas	2.62	1.36	1.89	2.47	2.57	2.40	2.30	2.54
California	3.40	2.60	2.51	2.63	2.32	2.41	2.59	2.49
Colorado	2.93	2.47	1.54	1.72	2.32	1.52	1.85	2.06
Connecticut	3.26	2.78	2.30	2.78	3.01	2.69	2.62	2.79
Delaware	3.65	2.32	2.32	2.35	3.39	3.01	3.19	4.14
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.38	2.56	2.59	2.99	3.28	3.09	2.91	3.18
Georgia	2.50	3.08	2.72	2.51	2.23	3.25	3.80	5.05
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	3.10	2.12	1.98	2.25	2.70	2.60	2.43	3.03
Indiana	3.86	3.38	2.99	2.95	3.14	3.32	3.21	3.40
Iowa	3.45	2.95	1.80	2.87	2.83	2.55	2.64	3.82
Kansas	2.62	1.88	1.81	2.35	2.19	2.16	2.13	2.45
Kentucky	3.51	2.82	2.59	3.05	3.36	3.15	3.78	3.40
Louisiana	3.12	2.25	2.16	2.64	2.96	2.72	2.63	2.99
Maine	—	—	—	—	—	—	—	—
Maryland	4.02	2.65	2.85	2.49	3.25	3.12	3.13	3.97
Massachusetts	3.85	2.69	2.33	2.71	3.37	3.03	3.08	3.62
Michigan	0.73	0.55	0.59	0.91	0.73	0.88	0.90	0.71
Minnesota	2.19	2.14	2.14	2.10	2.14	2.09	2.36	2.63
Mississippi	3.23	2.10	2.00	2.52	2.85	2.64	2.49	2.95
Missouri	2.61	2.38	2.24	2.41	2.63	2.50	2.42	2.20
Montana	1.66	0.65	6.59	6.79	3.49	4.69	5.95	8.98
Nebraska	2.85	1.85	1.81	2.16	2.27	1.74	1.58	1.94
Nevada	2.37	2.71	1.96	2.20	1.83	2.06	1.90	2.08
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	3.16	2.36	2.42	2.79	3.15	3.14	3.37	3.50
New Mexico	2.94	2.17	1.94	2.33	2.01	1.99	2.04	2.17
New York	3.39	2.37	2.26	2.74	3.06	2.89	2.80	3.35
North Carolina	4.20	2.55	2.80	3.31	3.51	2.93	2.66	3.23
North Dakota	3.92	2.94	—	3.32	2.71	2.81	2.91	—
Ohio	3.92	2.96	2.80	2.70	3.18	3.51	2.99	3.48
Oklahoma	3.61	2.93	2.38	2.64	2.70	2.72	2.95	3.15
Oregon	1.42	1.42	1.27	1.24	1.25	—	—	—
Pennsylvania	3.31	2.70	1.67	2.63	3.52	2.74	3.38	2.64
Rhode Island	2.34	1.81	1.78	2.32	2.27	2.13	2.10	2.36
South Carolina	4.47	5.32	4.01	4.67	3.94	3.69	4.75	4.44
South Dakota	—	—	—	—	2.36	—	—	—
Tennessee	1.20	—	—	—	—	—	—	—
Texas	2.82	2.23	2.10	2.45	2.63	2.46	2.35	2.48
Utah	—	—	1.50	1.67	1.57	2.39	—	—
Vermont	3.37	2.68	2.70	3.15	3.45	3.17	—	2.72
Virginia	2.04	3.77	2.93	2.83	3.36	3.14	3.61	1.51
Washington	5.03	4.35	4.01	4.98	6.14	5.52	4.05	4.22
West Virginia	2.87	3.69	—	3.28	3.35	3.31	2.82	3.00
Wisconsin	3.48	2.55	2.38	2.87	2.97	2.56	2.71	3.01
Wyoming	17.57	17.64	3.19	7.72	3.19	6.99	3.44	30.24
Total	3.04	2.37	2.24	2.57	2.69	2.59	2.52	2.68

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

— = Not Applicable.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998

State	YTD 1998		YTD 1997		YTD 1996		1998	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	February	
							Commercial	Industrial
Alabama	78.3	18.7	78.7	18.6	86.4	26.0	80.1	17.8
Alaska	NA	100.0	68.6	97.5	76.2	62.5	NA	100.0
Arizona	87.0	30.1	87.6	22.2	89.8	22.6	87.2	27.7
Arkansas	95.4	10.7	96.3	13.2	96.7	15.5	95.3	10.9
California	56.2	9.9	58.2	11.4	59.7	11.8	54.3	8.7
Colorado	NA	NA	NA	NA	95.0	14.6	NA	NA
Connecticut	78.3	58.4	90.1	76.2	93.2	96.4	78.2	57.8
Delaware	100.0	27.4	100.0	31.3	100.0	58.0	100.0	28.6
District of Columbia	59.6	—	65.4	—	81.6	—	59.0	—
Florida	95.9	4.6	96.3	7.7	96.8	15.6	96.1	4.6
Georgia	89.5	16.6	93.2	20.6	97.9	43.3	90.3	16.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	89.4	2.7	88.7	2.0	89.4	1.2	88.7	3.0
Illinois	52.3	10.3	58.5	12.2	57.6	18.4	50.4	9.8
Indiana	NA	NA	93.4	20.0	98.3	25.9	84.6	11.1
Iowa	88.0	7.2	89.9	8.5	91.2	9.5	88.7	7.1
Kansas	72.2	5.1	75.3	10.3	83.9	6.8	73.1	5.3
Kentucky	88.3	14.4	91.5	20.8	93.0	38.7	86.5	17.2
Louisiana	67.2	5.7	92.9	9.0	98.2	10.6	60.9	6.1
Maine	100.0	97.9	100.0	100.0	100.0	100.0	100.0	97.9
Maryland	60.2	2.0	83.7	9.0	95.6	20.7	54.7	3.7
Massachusetts	NA	19.8	67.3	22.9	84.1	32.5	NA	32.5
Michigan	67.5	9.8	69.3	10.4	72.9	14.4	65.2	12.6
Minnesota	92.5	41.0	98.6	41.4	97.5	39.6	93.3	37.4
Mississippi	NA	NA	96.6	37.9	98.1	43.3	94.8	38.5
Missouri	NA	NA	83.1	23.2	88.6	30.0	85.4	24.0
Montana	86.2	4.5	91.8	4.3	93.0	4.9	83.1	4.3
Nebraska	79.0	26.9	82.3	27.9	81.6	24.7	78.0	23.2
Nevada	78.4	2.4	78.4	3.0	79.8	2.1	79.8	15.3
New Hampshire	96.3	33.8	98.9	48.1	98.3	57.8	96.2	37.2
New Jersey	60.7	48.5	79.6	51.0	80.9	58.1	62.1	34.6
New Mexico	68.6	8.3	73.3	13.9	67.9	1.5	64.4	1.8
New York	NA	NA	66.0	7.4	NA	13.1	NA	NA
North Carolina	93.3	27.5	98.0	63.8	99.8	84.9	93.1	27.3
North Dakota	87.2	34.7	93.6	46.7	91.8	24.7	84.9	33.3
Ohio	60.4	4.5	70.6	7.1	76.7	11.6	60.2	4.7
Oklahoma	82.1	5.8	90.6	8.0	89.4	9.5	83.2	5.2
Oregon	99.3	15.1	98.8	18.4	98.6	26.5	99.2	15.3
Pennsylvania	58.0	15.7	69.5	16.9	78.0	23.4	57.2	15.2
Rhode Island	67.8	12.7	90.6	13.2	99.7	14.6	71.6	38.5
South Carolina	98.3	85.6	99.1	82.5	100.0	85.3	98.4	85.4
South Dakota	86.1	45.6	86.4	30.9	88.9	27.2	85.7	45.9
Tennessee	NA	NA	93.2	32.1	97.7	51.8	87.8	25.5
Texas	58.7	NA	66.5	18.2	88.2	21.9	50.7	NA
Utah	87.4	8.1	86.7	10.5	84.8	9.4	89.1	8.5
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	75.5	16.5	84.7	14.2	95.6	21.8	76.7	14.6
Washington	NA	NA	87.3	26.8	89.4	32.8	85.7	21.0
West Virginia	39.5	8.6	67.8	14.6	63.6	18.5	29.9	14.9
Wisconsin	83.2	25.0	88.2	36.8	94.3	44.9	80.3	23.8
Wyoming	NA	NA	83.7	1.7	97.8	3.0	80.3	NA
Total	70.7	15.8	77.3	18.6	83.2	22.3	68.7	16.0

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1998		1997					
	January		Total		December		November	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	76.7	19.4	^R 56.8	^R 18.4	75.3	21.8	61.7	20.2
Alaska	59.9	100.0	^R 63.1	^R 97.8	61.7	100.0	59.4	100.0
Arizona	86.9	32.3	^R 84.5	^R 26.5	85.2	33.8	83.2	32.0
Arkansas	95.5	10.5	^R 93.9	^R 10.6	95.7	10.5	89.9	11.2
California	58.1	11.0	^R 50.2	^R 9.8	54.4	9.9	49.1	7.9
Colorado	NA	NA	NA	NA	93.9	24.8	NA	NA
Connecticut	78.4	61.0	NA	^R 65.4	76.9	62.9	83.1	55.7
Delaware	100.0	26.4	^R 100.0	^R 29.7	^R 100.0	25.8	100.0	26.3
District of Columbia	60.2	—	^R 58.5	—	60.8	—	60.4	—
Florida	95.8	4.9	^R 96.6	NA	94.7	5.1	95.2	5.0
Georgia	88.7	16.5	^R 88.0	^R 16.9	90.6	22.7	87.3	18.3
Hawaii	100.0	—	NA	—	100.0	—	NA	—
Idaho	90.0	2.5	^R 86.1	^R 2.2	86.6	2.0	83.2	1.9
Illinois	53.7	10.7	^R 53.3	^R 9.9	51.1	10.7	51.5	8.2
Indiana	NA	NA	NA	NA	NA	NA	91.5	19.2
Iowa	87.4	7.4	^R 87.2	^R 7.7	88.8	8.4	84.3	12.0
Kansas	71.5	5.0	NA	NA	NA	NA	56.7	5.7
Kentucky	90.0	12.3	NA	NA	90.6	14.2	89.2	14.4
Louisiana	^R 74.1	5.4	^R 93.3	^R 8.1	98.0	6.3	97.4	7.4
Maine	100.0	97.9	^R 100.0	^R 91.4	100.0	89.7	100.0	92.2
Maryland	65.6	0.7	^R 64.5	^R 6.1	61.1	0.9	37.4	41.7
Massachusetts	64.3	30.3	^R 60.4	^R 18.7	66.2	31.6	60.0	32.2
Michigan	69.5	13.5	^R 62.8	^R 6.4	64.7	11.8	63.9	9.3
Minnesota	91.9	45.0	^R 98.5	^R 41.9	98.4	42.2	99.1	44.2
Mississippi	NA	NA	NA	NA	94.4	38.3	93.3	35.4
Missouri	NA	NA	NA	NA	82.7	22.9	78.3	19.9
Montana	88.3	4.7	^R 90.8	^R 3.1	92.7	3.8	90.4	2.8
Nebraska	79.9	30.1	^R 70.4	^R 22.3	74.1	20.4	68.9	34.2
Nevada	77.3	7.2	^R 71.3	^R 1.8	72.6	6.9	67.9	5.9
New Hampshire	96.4	30.4	NA	NA	94.0	32.4	89.1	34.2
New Jersey	59.4	31.7	^R 66.1	^R 48.8	62.6	32.9	58.9	32.2
New Mexico	71.5	8.3	^R 66.9	^R 14.2	75.5	16.3	70.9	14.1
New York	NA	NA	^R 56.7	^R 6.3	^R 59.8	^R 8.3	^R 56.6	^R 7.7
North Carolina	93.4	27.6	^R 94.1	^R 40.4	95.5	30.7	99.4	78.1
North Dakota	89.1	36.1	^R 88.2	^R 39.5	84.8	37.3	90.8	35.6
Ohio	60.5	4.5	^R 64.7	^R 4.0	66.3	5.1	66.5	4.2
Oklahoma	81.1	6.3	^R 85.1	^R 4.6	85.5	5.4	78.5	4.3
Oregon	99.3	19.7	^R 98.5	^R 15.7	98.4	14.5	98.4	13.4
Pennsylvania	58.7	16.3	^R 62.1	^R 13.8	62.4	12.3	61.9	13.9
Rhode Island	64.5	39.7	^R 80.5	^R 17.4	64.0	36.0	80.7	41.2
South Carolina	98.1	85.8	^R 98.1	^R 80.6	97.6	81.5	100.0	86.6
South Dakota	86.5	45.2	^R 83.3	^R 24.0	86.1	34.2	84.0	37.5
Tennessee	NA	NA	NA	NA	90.8	24.2	92.5	38.9
Texas	68.3	13.9	^R 59.7	NA	^R 66.3	12.9	^R 61.5	12.1
Utah	85.7	7.8	^R 83.2	^R 9.2	86.1	8.5	83.1	9.8
Vermont	100.0	100.0	^R 100.0	^R 100.0	100.0	100.0	100.0	100.0
Virginia	74.4	18.7	^R 76.9	^R 12.5	76.7	14.4	88.7	21.2
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	56.0	6.3	^R 51.3	^R 12.1	55.6	11.1	50.3	13.8
Wisconsin	85.4	26.0	^R 80.8	^R 28.5	82.1	27.9	84.7	28.9
Wyoming	NA	NA	NA	NA	92.7	1.9	79.4	1.3
Total	^R 72.4	15.6	^R 69.4	^R 16.1	^R 72.1	15.1	^R 67.5	16.1

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	October		September		August		July	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	42.8	18.2	33.1	17.6	25.1	17.4	22.8	17.3
Alaska	60.1	100.0	59.0	100.0	54.2	92.8	59.5	91.4
Arizona	81.1	31.0	83.9	30.3	78.7	30.1	79.7	31.3
Arkansas	92.2	10.0	90.9	8.7	91.4	7.9	89.9	9.3
California	41.6	6.1	40.9	9.9	41.5	7.7	45.6	7.8
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	NA	66.5	74.9	65.5	80.1	62.1	72.8	63.5
Delaware	100.0	29.0	100.0	25.7	100.0	27.5	100.0	27.5
District of Columbia	44.5	—	35.5	—	38.8	—	43.9	—
Florida	96.7	5.4	96.9	NA	97.3	6.1	96.9	5.7
Georgia	84.5	20.6	81.6	9.1	80.1	15.7	79.1	17.4
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	76.4	1.6	82.5	1.7	82.9	1.4	83.2	5.2
Illinois	49.1	7.1	46.7	10.4	39.4	5.3	45.8	3.4
Indiana	87.4	12.2	75.4	8.4	74.7	7.8	72.4	9.0
Iowa	79.4	10.3	77.2	5.9	84.5	6.5	75.0	5.3
Kansas	66.3	5.8	50.3	6.4	44.9	7.0	46.8	5.5
Kentucky	NA	NA	83.9	13.0	79.1	11.5	82.9	12.4
Louisiana	98.4	7.0	98.1	7.1	99.2	8.0	98.8	7.9
Maine	100.0	89.4	100.0	87.8	100.0	88.6	100.0	100.0
Maryland	50.5	5.5	49.0	2.0	54.3	4.9	57.5	3.4
Massachusetts	46.0	25.9	41.4	28.0	39.1	22.4	43.6	23.6
Michigan	53.3	4.2	38.8	3.1	39.8	3.9	54.7	5.8
Minnesota	98.6	40.2	97.7	41.9	98.3	37.0	98.4	47.2
Mississippi	89.5	37.5	NA	NA	NA	NA	NA	NA
Missouri	NA	NA	68.4	22.5	68.7	16.7	68.9	18.6
Montana	87.9	2.3	85.5	1.9	87.4	2.0	90.4	1.7
Nebraska	46.6	17.4	59.0	21.0	64.8	14.4	64.4	34.1
Nevada	65.9	5.5	62.9	4.6	63.1	7.0	73.2	10.2
New Hampshire	85.7	44.2	NA	NA	88.1	47.1	87.0	51.4
New Jersey	57.7	27.7	58.1	28.1	59.0	44.0	55.6	26.5
New Mexico	57.2	9.5	52.9	14.6	53.2	18.3	53.5	18.5
New York	^R 27.9	^R 8.1	^R 49.8	^R 6.2	^R 44.0	^R 7.8	^R 49.6	^R 17.7
North Carolina	98.2	68.8	86.4	21.2	84.4	24.2	84.6	20.4
North Dakota	84.0	26.1	74.7	19.4	68.8	28.1	46.5	45.7
Ohio	54.1	1.8	49.5	1.5	48.4	2.0	46.5	2.0
Oklahoma	75.7	3.1	75.5	3.2	73.6	3.0	79.0	3.8
Oregon	97.5	14.5	98.0	13.2	98.3	12.4	98.3	13.8
Pennsylvania	48.6	12.7	54.6	12.1	64.5	12.5	54.5	^R 10.8
Rhode Island	71.1	39.9	68.7	33.6	67.9	39.6	71.1	41.7
South Carolina	99.9	87.5	98.5	84.8	96.4	63.9	99.9	74.5
South Dakota	68.3	17.8	59.9	14.0	72.1	12.7	78.3	12.0
Tennessee	86.4	26.8	82.4	18.2	80.4	19.8	80.7	24.4
Texas	59.4	13.9	47.0	NA	52.3	14.1	50.6	14.2
Utah	80.2	9.2	74.8	12.0	71.7	7.9	72.8	8.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	68.1	13.5	67.6	7.4	64.6	4.9	62.9	5.5
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	35.6	13.2	29.8	11.8	21.6	11.2	23.2	11.8
Wisconsin	67.9	25.7	60.9	22.8	53.8	21.3	66.1	20.4
Wyoming	79.7	NA	NA	NA	75.8	2.1	28.8	2.1
Total	^R 60.6	15.2	^R 58.1	13.8	56.6	13.8	^R 58.7	^R 14.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	June		May		April		March	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	49.5	17.2	55.5	18.0	59.3	17.3	76.2	17.9
Alaska	60.0	99.0	63.8	99.0	65.8	98.8	66.0	98.6
Arizona	82.7	18.7	86.1	18.1	83.8	21.2	86.5	22.8
Arkansas	90.7	10.2	91.4	11.3	93.5	10.9	94.9	12.1
California	48.2	8.9	49.5	13.0	51.6	10.6	54.5	11.0
Colorado	NA	NA	NA	NA	95.0	25.2	NA	NA
Connecticut	77.1	63.7	79.7	65.6	87.1	68.2	87.0	68.2
Delaware	100.0	28.2	100.0	34.4	100.0	35.6	100.0	32.7
District of Columbia	46.7	—	53.7	—	100.0	—	59.9	—
Florida	97.6	6.8	97.7	6.4	97.8	7.0	97.0	6.7
Georgia	82.7	13.4	83.9	12.9	87.2	15.9	88.9	15.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	83.3	2.3	86.5	2.5	86.1	2.1	87.8	2.1
Illinois	54.8	14.7	47.4	13.8	53.1	8.4	54.4	10.3
Indiana	39.6	9.2	38.3	9.6	82.1	10.6	86.5	12.7
Iowa	90.1	5.1	83.2	5.4	90.3	7.2	88.5	7.4
Kansas	56.1	4.9	58.3	13.9	66.1	12.6	60.1	11.4
Kentucky	87.7	14.1	85.3	15.7	88.2	14.9	89.6	15.5
Louisiana	98.6	8.3	98.5	9.0	98.1	7.6	71.7	10.7
Maine	100.0	88.5	100.0	91.2	100.0	91.3	100.0	91.8
Maryland	56.5	6.7	62.3	12.5	76.8	1.6	79.8	17.3
Massachusetts	46.1	32.3	67.1	41.7	72.2	38.5	70.9	34.4
Michigan	44.8	5.4	57.7	7.8	65.3	10.4	66.4	12.8
Minnesota	97.0	37.7	97.8	39.3	98.0	42.6	99.0	47.3
Mississippi	91.5	35.9	96.7	39.8	92.4	35.4	95.8	36.5
Missouri	71.5	18.5	76.9	24.1	80.7	16.7	83.9	27.3
Montana	88.7	2.2	90.2	2.1	91.1	4.5	90.4	4.1
Nebraska	61.4	17.1	68.2	21.4	72.3	19.0	70.8	21.8
Nevada	61.0	9.9	65.7	7.4	69.2	8.0	78.1	7.3
New Hampshire	90.7	55.4	91.6	75.1	92.0	62.3	94.0	53.6
New Jersey	60.8	26.3	56.5	28.5	64.0	36.9	68.5	30.3
New Mexico	43.1	8.1	59.5	10.9	58.1	2.8	70.5	3.9
New York	^R 49.9	^R 7.2	^R 54.9	^R 8.5	^R 60.6	^R 9.1	^R 63.4	^R 9.9
North Carolina	97.5	40.8	89.3	21.7	87.5	22.4	91.6	30.2
North Dakota	80.8	28.9	88.7	36.5	91.9	39.4	91.4	59.4
Ohio	46.3	2.0	58.0	3.2	64.8	3.3	69.2	5.5
Oklahoma	79.2	2.1	82.0	4.1	86.3	3.7	88.1	5.9
Oregon	98.1	17.3	98.5	16.7	98.5	19.3	98.8	19.6
Pennsylvania	54.7	13.1	48.0	13.3	64.7	14.1	64.3	15.4
Rhode Island	72.4	48.1	80.8	48.5	88.5	55.8	82.2	61.7
South Carolina	91.0	89.0	100.0	87.0	95.8	77.7	97.4	80.3
South Dakota	83.7	10.7	80.7	17.3	85.7	22.6	86.3	26.7
Tennessee	NA	NA	86.7	29.6	90.4	28.1	NA	NA
Texas	56.6	19.1	56.5	18.1	59.2	20.1	^R 60.5	17.3
Utah	77.0	9.4	78.8	9.0	83.8	9.2	83.0	6.7
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	65.3	8.1	72.2	6.5	72.6	12.2	77.0	13.2
Washington	79.8	25.5	80.7	21.0	83.1	26.8	86.0	27.3
West Virginia	29.1	11.3	43.8	11.4	49.6	7.1	60.3	19.7
Wisconsin	58.8	19.9	75.5	27.6	81.8	25.6	87.4	34.0
Wyoming	52.1	1.9	77.8	1.8	62.1	1.9	74.0	1.8
Total	60.3	^R 16.0	63.8	16.6	^R 70.9	16.9	^R 72.9	^R 17.4

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997				1996			
	February		January		Total		December	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	79.7	19.5	77.7	17.7	81.1	22.6	80.7	22.4
Alaska	67.3	97.9	69.5	97.1	63.4	64.3	61.8	68.0
Arizona	87.8	24.7	87.4	19.9	85.2	19.7	84.1	19.9
Arkansas	96.6	13.6	96.1	12.9	95.0	13.3	95.7	13.8
California	58.5	11.3	58.0	11.3	54.9	11.2	56.1	9.9
Colorado	NA	NA	NA	NA	93.2	7.4	94.3	7.1
Connecticut	90.2	78.8	90.1	76.0	87.0	84.6	87.9	80.1
Delaware	100.0	34.0	100.0	28.8	100.0	37.3	100.0	30.8
District of Columbia	62.8	—	67.9	—	70.5	—	65.3	—
Florida	96.6	8.0	96.1	8.2	97.1	13.4	96.1	12.5
Georgia	92.7	21.1	93.7	20.0	94.1	32.2	93.2	31.6
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	89.7	2.2	87.8	1.9	86.6	1.4	87.6	2.6
Illinois	54.3	9.8	62.0	14.6	53.9	13.7	56.1	22.5
Indiana	93.0	19.8	93.7	20.1	96.3	16.6	97.4	21.4
Iowa	89.4	7.2	90.3	9.6	87.7	9.0	87.2	11.7
Kansas	65.7	13.2	86.2	8.2	71.7	7.7	71.6	8.3
Kentucky	90.8	19.4	91.9	22.1	90.8	27.1	91.9	24.1
Louisiana	98.4	8.6	88.0	9.5	98.3	10.6	98.0	11.3
Maine	100.0	100.0	100.0	100.0	100.0	91.0	100.0	90.2
Maryland	82.8	14.7	84.5	2.8	91.9	11.7	93.2	19.7
Massachusetts	67.3	36.8	67.3	^R 34.3	74.7	41.9	68.9	33.8
Michigan	69.4	14.2	69.2	14.0	66.9	12.5	70.2	15.8
Minnesota	98.7	45.5	98.6	37.1	96.2	41.3	95.6	44.5
Mississippi	96.3	37.6	96.9	38.4	97.4	41.7	96.9	44.1
Missouri	79.9	19.5	86.3	28.3	82.2	24.7	84.6	33.1
Montana	93.0	4.1	90.9	4.4	91.5	3.4	92.7	4.3
Nebraska	87.9	27.0	77.6	28.9	70.0	20.4	76.6	23.5
Nevada	79.7	15.2	77.2	8.3	74.2	7.2	74.9	7.8
New Hampshire	99.1	52.1	98.8	44.2	96.9	55.4	96.1	45.4
New Jersey	93.5	36.0	70.6	35.9	73.3	53.6	70.2	35.5
New Mexico	72.5	2.1	74.0	19.4	64.7	3.5	71.8	13.3
New York	^R 65.8	^R 10.0	^R 66.3	^R 11.8	77.0	14.7	NA	13.1
North Carolina	95.9	39.6	100.0	90.1	96.5	59.4	99.0	91.6
North Dakota	93.9	49.5	93.4	43.3	88.0	26.5	91.0	43.9
Ohio	68.5	5.6	72.5	8.4	71.8	7.4	74.0	10.0
Oklahoma	90.5	8.7	90.7	7.4	84.5	6.6	87.6	7.1
Oregon	98.9	20.2	98.8	17.0	98.3	18.0	98.6	16.0
Pennsylvania	69.8	14.9	69.3	18.9	70.4	18.5	61.0	22.3
Rhode Island	91.7	45.9	89.6	38.1	91.8	16.9	89.1	12.4
South Carolina	98.2	78.2	100.0	86.8	99.0	85.8	100.0	89.3
South Dakota	85.7	30.4	86.9	31.4	82.7	24.6	82.8	23.5
Tennessee	92.5	28.7	94.0	35.9	94.3	47.0	95.3	42.8
Texas	67.8	17.1	65.4	19.2	83.5	20.2	87.1	17.5
Utah	87.2	10.8	86.2	10.2	81.9	9.0	84.4	9.7
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	81.6	6.8	87.5	15.5	85.3	18.0	88.1	22.1
Washington	86.7	26.8	87.8	26.7	85.9	24.4	87.4	27.2
West Virginia	67.8	14.8	67.8	14.4	56.3	14.3	71.3	14.4
Wisconsin	87.3	35.9	88.8	37.6	91.6	36.4	91.8	34.5
Wyoming	82.1	1.9	85.0	1.5	85.9	2.9	69.0	3.1
Total	^R 76.9	17.7	^R 77.5	^R 19.4	77.6	19.4	78.1	20.0

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1996							
	November		October		September		August	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	73.2	22.6	71.2	20.4	73.1	20.8	72.5	19.6
Alaska	58.2	71.3	54.2	64.8	50.7	67.0	53.1	60.9
Arizona	84.1	18.2	83.2	16.8	83.5	16.7	78.5	18.0
Arkansas	94.1	13.6	90.2	13.6	92.7	11.3	91.6	10.9
California	57.9	10.8	44.1	9.3	45.3	9.9	44.7	9.0
Colorado	92.8	8.3	89.1	9.7	90.6	9.2	87.1	8.3
Connecticut	84.0	74.8	81.3	71.9	68.9	71.2	77.6	78.0
Delaware	100.0	32.5	100.0	30.7	100.0	27.6	100.0	26.2
District of Columbia	55.1	—	48.0	—	46.9	—	52.1	—
Florida	97.0	11.1	97.4	12.2	97.6	10.1	97.2	11.0
Georgia	92.2	26.7	90.6	28.9	86.6	35.0	88.1	28.5
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	84.9	0.5	77.3	1.7	80.0	1.3	81.9	1.8
Illinois	53.0	13.7	48.8	8.6	43.2	6.4	43.0	5.8
Indiana	96.1	16.3	91.5	11.7	86.8	9.2	86.8	9.4
Iowa	86.6	18.4	81.8	9.8	77.0	5.6	92.2	8.3
Kansas	82.4	6.9	70.0	9.2	72.8	9.4	38.0	7.3
Kentucky	88.9	21.5	88.9	20.9	84.3	18.6	85.4	18.1
Louisiana	98.3	NA	98.6	NA	98.9	10.2	97.5	12.1
Maine	100.0	91.5	100.0	91.3	100.0	89.1	100.0	88.0
Maryland	92.2	2.1	87.3	3.7	87.0	1.6	85.0	3.7
Massachusetts	62.5	45.3	69.5	39.6	55.4	34.6	61.3	39.6
Michigan	67.2	12.7	55.8	8.1	44.6	5.5	41.3	6.0
Minnesota	94.8	44.1	92.4	41.2	90.3	35.8	95.8	38.6
Mississippi	96.7	44.8	96.0	39.1	97.2	40.0	97.9	41.5
Missouri	78.6	27.7	69.3	17.0	67.3	18.2	58.1	13.2
Montana	91.6	4.4	87.5	2.8	86.1	2.1	87.2	1.4
Nebraska	68.6	23.3	40.3	15.2	66.2	17.0	54.1	17.2
Nevada	70.8	7.4	64.0	5.2	67.6	5.3	66.7	5.6
New Hampshire	93.6	59.3	94.3	53.7	96.0	53.7	94.8	51.4
New Jersey	69.4	52.7	67.2	48.2	61.8	53.2	60.0	57.8
New Mexico	68.5	4.8	63.5	2.6	61.3	2.0	62.2	3.8
New York	NA	11.4	NA	11.3	NA	12.5	NA	12.9
North Carolina	92.0	49.7	85.7	26.7	86.1	24.7	88.5	34.7
North Dakota	89.7	49.6	79.9	36.2	69.1	21.1	74.5	8.7
Ohio	72.4	7.8	68.5	3.7	65.1	4.3	53.9	3.6
Oklahoma	82.1	7.6	73.0	4.7	72.7	4.8	69.0	5.4
Oregon	98.3	14.4	97.0	14.1	97.6	14.2	98.0	13.6
Pennsylvania	63.3	16.6	59.7	13.5	66.3	13.8	66.2	14.8
Rhode Island	87.3	17.4	66.5	18.3	49.9	13.2	86.8	14.5
South Carolina	97.4	85.8	96.4	83.4	97.3	84.5	97.3	84.7
South Dakota	80.6	24.2	72.9	10.4	69.4	7.9	66.9	8.8
Tennessee	92.8	40.6	87.3	45.0	80.8	36.2	88.4	40.4
Texas	84.2	16.5	NA	20.2	77.9	19.4	81.1	21.8
Utah	81.2	9.3	79.5	9.4	78.4	8.3	71.9	7.5
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	84.8	21.4	74.3	11.1	65.5	11.9	74.0	10.2
Washington	84.6	22.2	82.7	19.8	81.5	20.4	80.1	12.0
West Virginia	54.5	14.8	43.4	13.3	34.7	12.0	44.4	13.1
Wisconsin	90.9	34.6	87.1	29.9	82.4	26.6	83.8	26.0
Wyoming	81.1	0.8	70.5	0.9	98.7	4.0	98.3	4.0
Total	75.7	18.5	69.1	17.2	67.1	16.9	66.3	17.4

^R = Revised Data.

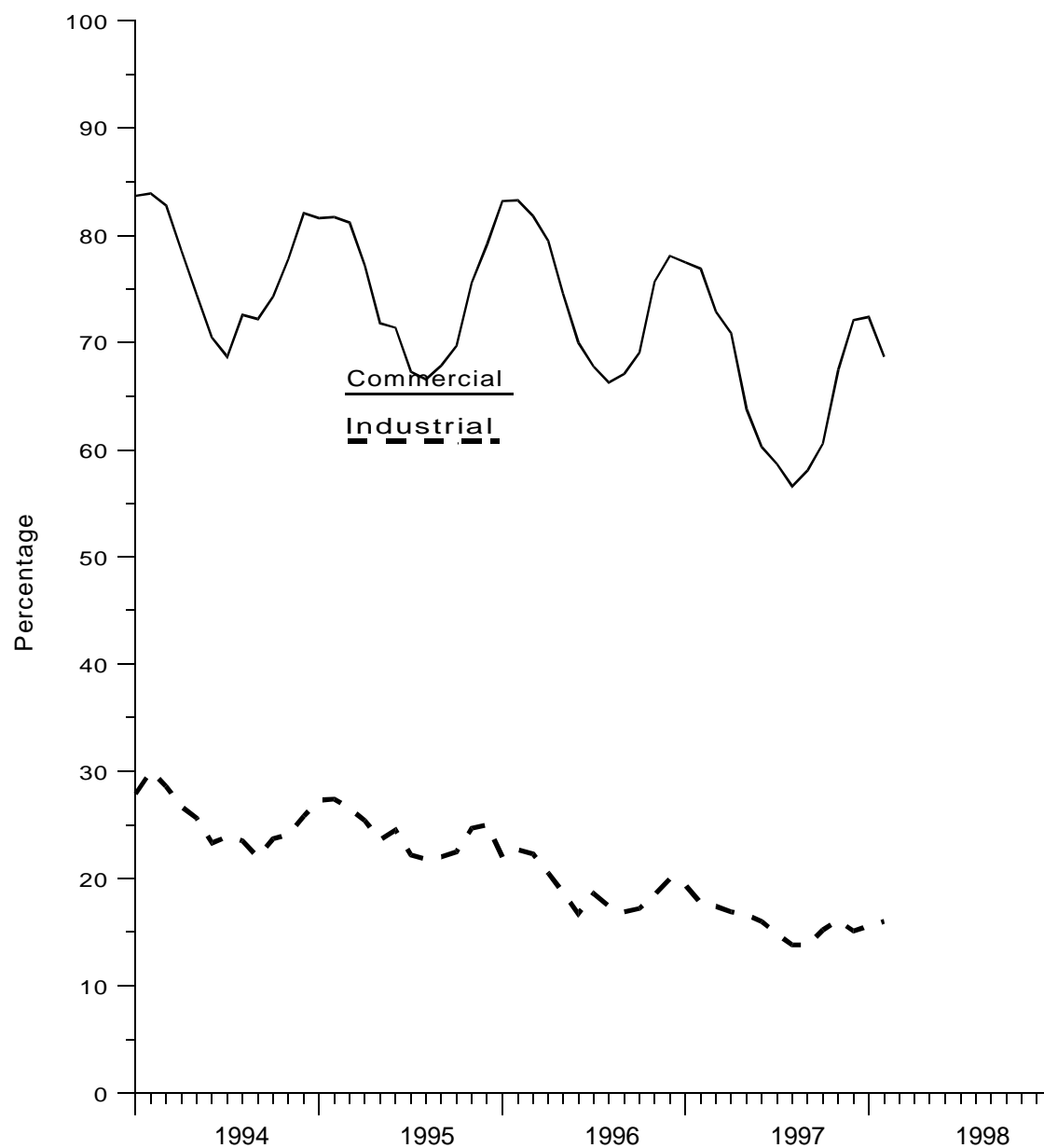
NA = Not Available.

— = Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1994-1998



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated from Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables 1, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting

volumes greater than zero are Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for non-hydrocarbon gas removed, gas used for repressuring,

and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for non-hydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publications. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual*.

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C, "Statistical Considerations," for a detailed explanation of sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

- There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.
- The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual*.

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or "dome" formations), depleted fields (depleted reservoirs in oil and/or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability

is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

A preliminary estimate of the U.S. gas price is made each month based on the change in the production-weighted gas price from five States: Kansas, Mississippi, New Mexico, Oklahoma, and Texas. Gas prices for these five States are used because both their gas production and value represent a substantial sample of the U.S. gas production and value (roughly 50 percent), and their prices are readily available and provide a consistent series. The latest preliminary U.S. gas price estimate is calculated by multiplying the preliminary U.S. gas price estimate for the prior month by the ratio of the five States' gas price for the latest month to that

of the prior month. This estimate replaces the initial gas price estimate.

Final Monthly Data

Preliminary monthly gas price data for Kansas, Mississippi, New Mexico, Oklahoma, and Texas are replaced by final monthly data that are adjusted to match the annual prices published in the *Natural Gas Annual* for each State. A revised set of the monthly U.S. gas price estimates are derived based on the monthly change in the production-weighted prices for these five States and adjusted to match the U.S. gas price published in the *Natural Gas Annual*.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual*. For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply/disposition.

Note 10. Heating Degree-Days

Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the

Natural Gas Monthly is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home customers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and four monthly surveys.

The annual reports are the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines, and the Form EIA-627, a voluntary survey completed by energy or conservation agencies in the gas-producing States.

The monthly reports include two surveys of the natural gas industry and two surveys of the electric utility industry. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and/or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1996 for report year 1995 totaled 1,991 questionnaire packages. To this original mailing, 11 names were added and 61 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,941 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents followup, 1,911 responses were entered into the data base, and there were 30 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multiline schedule for reporting all supplies of natural gas and supplemental gaseous fuels

and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual*.

Form EIA-895, "Monthly Quantity of Natural Gas Report"

Survey Design

In 1996, an annual schedule was added to the Form EIA-895 to replace the Form EIA-627. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." In 1994, the IOGCC decided to discontinue collection of their form. All gas producing States are requested to report on the Form EIA-895; a voluntary report. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Beginning with 1980, natural gas production data previously obtained on an informal basis from State conservation agencies were collected on Form EIA-627. This form was designed by EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. The form was redesigned in 1990 to collect monthly breakdowns of all annual data elements. Data are not considered proprietary. It was also designed to avoid duplication of effort in collecting production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period.

Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Summary of Data Requirements

The Form EIA-895 monthly schedule consists of nine questions on one page, and requires volumetric information on gross production (gas and oil wells individually), gas used for repressuring, gas vented and flared, nonhydrocarbon gases removed, natural gas used as fuel on leases, marketed production, value based marketed production and the value in dollar amount of the marketed production.

Form EIA-895 annual schedule collects data on the monthly and annual production volume of natural gas (including gross withdrawals from both gas and oil wells); volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on leases; marketed production; the value of marketed production; and the number of producing gas wells.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual*.

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 are a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/ FEA-G-318 system. The data received on both the FPC-8 and FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 103 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day

withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to refile reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural

Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different.

Prior to 1995, the Form FPC-14 was filed annually by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export was originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of 382 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month's processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company's submission is eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and the Form EIA-759, "Monthly Power Plant Report.") See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors--residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability

proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata--companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two consumer sectors--the industrial and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value (C_j) were included in the certainty stratum. The formula for C_j was:

$$C_j = \frac{X_j}{2n} \quad (1)$$

where:

C_j = cutoff value for consumer sector j ,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j ,

X_i = the sum within State of annual gas volumes for company i ,

X_j = the sum within State of annual gas volumes in consumer sector j ,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors (X_i). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n \frac{X_2}{X_{..}} \quad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X_2 = the sum within State of the X_i for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using

$(I = \frac{X_2}{m})$. A uniform random number R was selected between zero and I . The first sampled company was

the first company on the list to have a cumulative measure of size greater than R . The second company selected was the first company on the list to have a cumulative measure of size greater than $R + I$. $R + I$ was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X_2 was the sum within State of the X_i for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled. The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_j}{Y'_j} \quad (3)$$

where:

Y_j = the sum within State of annual gas volumes in consumer sector j for all companies,

Y'_j = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_j = y_j \times E_{vj} \quad (4)$$

where:

V_j = the State estimate of monthly gas volumes in consumer sector j,

y_j = the sum within State of reported monthly gas volumes in consumer sector j.

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j,

R_j = the reported revenue from natural gas sales within the State in consumer sector j,

V_j = the reported volume of natural gas sales within the State in consumer sector j.

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_{t-1} \times \frac{y_{jt}}{y_{jt-1}} \quad (5)$$

where:

F_t = imputed gas volume for current month t,

F_{t-1} = gas volume for the company for the previous month,

y_{jt} = gas volume reported by companies in the State stratum for report month t,

y_{jt-1} = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*. The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V_{jm}^* = V_{jm} + \left[(V_{ja} - V'_{jm}) \left(\frac{V_{jm}}{V'_{jm}} \right) \right] \quad (6)$$

where:

V_{jm}^* = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate. The formula for revising the estimated revenue is:

$$R_{jm}^* = R_{jm} + \left[(R_{ja} - R'_{jm}) \left(\frac{R_{jm}}{R'_{jm}} \right) \right] \quad (7)$$

where:

R_{jm}^* = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues. Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of nonsampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^H \left[N_h^2 \frac{(1 - \frac{n_h}{N_h})}{n_h(n_h - 1)} \left(\sum_{i=1}^{n_h} (y_i - T x_i)^2 \right) \right] \quad (8)$$

where:

H = the total number of strata

N_h = the total number of companies in stratum h

n_h = the sample size in stratum h

y_i = the reported monthly volume for company i

x_i = the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, February 1998

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	1,032	269	2,968	3,154	0.50	0.33	1.26
Alaska	0	0	0	0	—	—	—
Arizona	80	49	0	94	0.05	—	—
Arkansas	0	0	0	0	—	—	—
California	477	115	1,527	1,604	0.06	0.09	1.20
Colorado	5,028	3,189	107	5,955	0.40	1.38	0.72
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	435	220	1,019	1,130	0.99	0.36	2.14
Georgia	619	396	3,055	3,142	0.05	0.07	1.26
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	2,409	876	423	2,598	1.16	2.06	0.34
Indiana	1,249	678	2,953	3,277	0.24	0.51	0.41
Iowa	141	618	58	637	0.07	0.11	0.79
Kansas	1,179	1,165	635	1,775	0.50	1.69	1.32
Kentucky	201	207	95	304	0.11	0.14	5.51
Louisiana	340	10,908	7,499	13,241	0.38	0.15	0.02
Maine	0	0	0	0	—	—	—
Maryland	6	33	213	215	0.01	0.01	0.30
Massachusetts	177	284	1,008	1,062	0.09	0.10	0.64
Michigan	0	0	0	0	—	—	—
Minnesota	1,295	896	1,186	1,971	0.16	0.18	0.20
Mississippi	302	262	645	759	0.17	0.46	0.21
Missouri	476	365	180	626	0.18	0.11	0.89
Montana	3	0	0	3	0.01	0.02	—
Nebraska	93	18	67	116	0.04	0.10	0.01
Nevada	0	0	0	0	—	—	—
New Hampshire	0	0	0	0	—	—	—
New Jersey	0	0	0	0	—	—	—
New Mexico	543	311	794	1,011	0.56	0.98	—
New York	8,695	4,981	4,778	11,102	0.08	0.08	0.21
North Carolina	602	26	385	715	0.02	0.06	0.14
North Dakota	0	0	0	0	—	—	—
Ohio	1,428	80	126	1,436	0.28	0.13	0.32
Oklahoma	388	838	391	1,003	0.41	0.06	1.73
Oregon	0	0	0	0	—	—	—
Pennsylvania	406	288	2,895	2,938	0.13	0.03	0.05
Rhode Island	0	0	0	0	—	—	—
South Carolina	106	72	234	266	0.37	0.20	0.02
South Dakota	0	0	0	0	—	—	—
Tennessee	6,551	4,023	3,565	8,474	4.28	4.75	3.80
Texas	341	10,915	10,158	14,915	0.05	2.28	0.10
Utah	0	0	0	0	—	—	—
Vermont	0	0	0	0	—	—	—
Virginia	231	374	200	483	0.21	0.44	1.16
Washington	0	0	0	0	—	—	—
West Virginia	3,561	2,113	165	4,144	2.90	1.54	0.77
Wisconsin	3,025	1,772	1,130	3,684	0.40	0.31	0.29
Wyoming	70	197	119	240	0.33	0.34	0.93
Total	13,479	17,389	15,475	26,898	0.14	0.14	0.21

— = Not Applicable.

Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Natural Gas Reports and Feature Articles

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1995*, DOE/EIA-0131(95), November 1996.
- *Natural Gas Annual 1993 Supplement: Company Profiles*, DOE/EIA-0131(93/S), February 1995.
- *Natural Gas 1996 Issues and Trends*, DOE 0560(96), December 1996.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Natural Gas 1995: Issues and Trends*, DOE/EIA-0560(95), November 1995.
- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1995 Annual Report*, DOE/EIA-0216(95)/Advance Summary, October 1996.
- *Annual Energy Review 1995*, DOE/ EIA-0384(95), July 1996. Published annually.
- *Annual Report to Congress 1995 DOE/ EIA-01733(95)*, July 1996. Published annually.
- *Annual Energy Outlook 1996*, DOE/ EIA-0383(96), January 1996. Published annually.

Selected One-Time Natural Gas and Related Reports

- *The Value of Underground Storage in Today's Natural Gas Industry*, DOE/EIA-0591, March 1995.
- *Natural Gas Productive Capacity for the Lower 48 States, 1980 through 1995*, DOE/EIA-0542(95), July 1994.
- *Largest U.S. Oil and Gas Fields*, DOE/EIA-TR-0567, August 1993.
- *Energy Policy Act Transportation Rate Study*, DOE/EIA-0571, October 1993.
- *Energy Policy Act Transportation Study: Interim Report of Natural Gas Flows and Rates*, DOE/EIA-0602, October 1995.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(95), January 1996.
- *Oil and Gas Field Code Master List, 1995*, EIA-0370(95), December 1996.

Feature Articles

March 1995

The Comparability of Resource and Reserve Data for Crude Oil, Natural Gas, Coal, and Uranium

(Clarifies which terms are equivalent among the four major energy minerals in the United States.)

July 1995

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

June 1996

Natural Gas Industry Restructuring and Data Collection

(Discusses how restructuring of the natural gas industry has impacted the natural gas data collection efforts.)

July 1996

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

November 1996

U.S. Natural Gas Imports and Exports - 1995

(Contains final 1995 data on all U.S. imports and exports of natural gas.)

December 1996

Crosswell Seismology -- A View from Aside

(Discusses crosswell seismology and its geologic and economic implications for the domestic oil and gas industry.)

May 1997

Restructuring Energy Industries: Lessons from Natural Gas

(Compares and contrasts the natural gas and electric power industries.)

July 1997

Intricate Puzzle of Oil and Gas "Reserves Growth"

(Discusses the factors that affect ultimate recovery estimates of a field or reservoir.)

August 1997

Natural gas Residential Pricing Developments During the 1996-97 Winter

(Discusses key factors that affect pricing patterns, highlights the effects of weather, utilization patterns of natural gas storage, and pricing mechanisms used in natural gas markets.)

December 1997

Recent Trends in Natural Gas Spot Prices

(Focuses primarily on conditions and developments in the East Consuming Region and their connection to prices at the Henry Hub in the Producing Region.)

March 1998

EIA Corrects Errors in EIA's Drilling Activity Estimates Series

(Discusses and corrects errors in EIA's monthly and annual estimates of oil and gas drilling activity.)

Special Focuses

January 1997

Natural Gas Productive Capacity

(Analyzes monthly natural gas wellhead productive capacity in the lower 48 States from 1985 and 1996 and project this capacity for 1996 and 1997.)

Outlook for Natural Gas Through 2015

(Presents an outlook for natural gas through 2015.)

August 1997

Worldwide Natural Gas Supply and Demand And the Outlook For Global LNG Trade

(Focuses on natural gas into the next century with emphasis on world natural gas supply and demand to 2015.)

September 1997

Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1996 Annual Report - Advance Summary

(Focuses on proved reserves of domestic crude oil, natural gas, and natural gas liquids.)

Special Reports

March 1997

Natural Gas Analysis and Geographic Information Systems

(Explores how geographic information system techniques and methodologies are being used by the Energy Information Administration.)

April 1997

Natural Gas Pipeline and System Expansions

(Examines recent expansions to the North American natural gas

Natural Gas 1996: Highlights

(Reviews data for 1996 based on Energy Information Administration surveys.) pipeline network.)

July 1997

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

U.S. Natural Gas Imports and Exports - 1996

(Contains final 1996 data on all U.S. imports and exports of natural gas.)

September 1997

U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed

(Examines recent and proposed expansions of underground natural gas storage capacity and deliverability in the United States as of September 1, 1997.)

October 1997

Comparison of Natural Gas Storage Estimates from the EIA and AGA

(Compares EIA and AGA estimates from January 1994 through July 1997.)

April 1998

Natural Gas 1997: A Preliminary Summary

(Reviews data for 1997 based on Energy Information Administration surveys.)

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production	1, 2, 3	Monthly: Annual:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202) 586-6119
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Extraction Loss	1	Monthly: Annual:	EIA computations Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202) 586-6303
Supplemental Gaseous Fuels	2	Monthly: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202) 586-6303
Imports and Exports	2	Monthly: Annual:	EIA computations Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Linda Cook (202) 586-6306
Price: City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202) 586-6106
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202) 586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quarterly Natural Gas Import and and Export Sales and Price Report	Linda Cook (202) 586-6306
Producer Related Activities: Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202) 586-6119

Underground Storage:	9, 10, 11 12, 13, 14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption:				
Deliveries to:				
Residential,	15	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Commercial,	16		Natural Gas Purchases and Deliveries	(202) 586-4790
Industrial,	17		to Consumers"	
Electric Utility,	18		Form FERC-423, "Cost and Quality	
All Consumers	19		of Fuels for Electric Power Plants"	
Average Price to:				
City Gate,	20	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Residential,	21		Natural Gas Purchases and Deliveries	(202) 586-4790
Commercial,	22		to Consumers"	
Industrial,	23		Form FERC-423, "Cost and Quality	
Electric Utility	24		of Fuels for Electric Power Plants"	
Onsystem Sales	25	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
			Natural Gas Purchases and Deliveries	(202) 586-4790
			to Consumers"	
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric	Patricia Wells
			Administration	(202) 586-6077
Highlights				Mary Carlson
				(202) 586-4749

Appendix F

Natural Gas Electronic Products

In addition to printed publications, the Energy Information Administration distributes information concerning the natural gas industry in a variety of electronic formats through several media. Two main types of products are available electronically: *viewable documents* that may be read or printed; and *post-processable files* that may be directly used as input to a computer application without additional keying and checking of data.

Viewable documents represent complete or selected sections of publications including text, tables and graphs. They may be as specific as single tables or as general as an entire publication. Post-processable documents on the other hand are either macro-level rep-

resentations of information in published tables or micro-level respondent information representing responses on a specific nonconfidential survey.

The media used to distribute these electronic publications include: (1) The Energy Information Administration's Internet site (<http://www.eia.doe.gov> or <ftp://ftp.eia.doe.gov>); (2) Dial-in access through the Energy Information Administration's EPUB electronic bulletin board or through the Economic Bulletin Board of the Department of Commerce and the COGIS system; (3) The Energy Information Administration's quarterly CD-ROM(Info-Disk); (4) The Energy Information Administration's Fax on Demand System; and (5) diskettes.

	Internet	Dial-In	InfoDisk	Fax	Diskette
ANNUAL PUBLICATIONS					
Natural Gas Annual, Volume 1, 1994 Provides information on supply, and disposition of natural gas in the United States. Information is provided nationally, regionally, and by State for 1994.	V P		V P		P
Natural Gas Annual, Volume 2, 1994 Contains historical information about supply and disposition of natural gas at the national, regional, and State level as well as prices at selected points in the flow of gas from wellhead to burnertip.	P		P		P
Natural Gas 1995: Issues and Trends Addresses current issues affecting the natural gas industry and markets, and analyzes trends in the most recent natural gas data.	V		V		
Natural Gas 1994: Issues and Trends Provides an overview of the natural gas industry in 1993 and early 1994, focusing on the overall ability to deliver gas under the new regulatory mandates of the Federal Energy Regulatory Commission's Order 636.	V		V		
Oil and Gas Products List 1994-1995 Brief descriptions of the various information products prepared by the Office of Oil and Gas.	V		V		
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report 1994 1994 national and State estimates of reserves, reserve changes, and production, plus industry highlights.	V		V		
MONTHLY PUBLICATIONS					
Natural Gas Monthly, from September 1995 forward. Entire Publication in viewable format	V		V		

V=Viewable

P=Post-Processable

	Internet	Dial-In	InfoDisk	Fax	Diskette
OTHER PUBLICATIONS					
Natural Gas 1995: Preliminary Highlights This Special Focus, which was featured in the April 1996 issue of the <i>Natural Gas Monthly</i> , presents events that affected the natural gas industry during 1995.	V	P		V	
Energy Policy Act Transportation Study: Interim Report on Natural Gas Flow and Rates (EPACT) Analysis of natural gas transportation rates and distribution patterns for the period from 1988 through 1994.	V		V		
Oil Production Capacity Expansion Cost for the Persian Gulf Quantifies the cost of expanding oil production capacity for the Persian Gulf based on geologic plays and fields rather than country-level economics. Development costs and volumes are estimated for the next 15 years.	V		V		
Costs and Indices for Domestic Oil and Gas Field Equipment and Production Operations 1990-1993 Cost of equipment and operation of oil and gas wells in the lower 48 States.	V		V		
Drilling Sideways- A Review of Horizontal Well Technology and the Domestic Application April 1993 report presenting salient aspects of current and near-future horizontal drilling and completion technology.	V		V		
International Oil and Gas Exploration and Development Compilation of country-level data and assessment of regional trends relating to upstream aspects of global oil and gas supply.	V		V		
Natural Gas Productive Capacity for the Lower 48 States 1984-1996 Analysis of monthly natural gas wellhead productive capacity.	V		V		
Natural Gas Productive Capacity for the Lower 48 States 1980-1995 Analysis of monthly natural gas wellhead productive capacity.	V		V		
Oil and Gas Field Code Master List Comprehensive listing of U.S. oil and gas field names as of November 1995.	V		V		
Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadzhikistan, and Kyrgyzstan) Reservoir level assessments of oil and gas ultimate recovery in the former Soviet Union area.	V		V		
The Value of Underground Storage in Today's Natural Gas Industry Explores the significant and changing role of storage in the industry.	V		V		
U.S. Oil and Gas Development in the Early 1990's Analyses of the growing prominence of smaller energy companies in U.S. oil and gas production	V		V		
ANNUAL DATA					
Natural Gas Supply and Disposition, by State 1994	V P	V P		V	

V=Viewable

P=Post-Processable

	Internet	Dial-In	InfoDisk	Fax	Diskette
Natural Gas Summary, United States by Year 1990-1994	V P	V P		V	
1994 Natural Gas Annual Volume 1 data Self-extracting file containing data (in comma-delimited format) that appear in the tables in Volume I of the 1994 <i>Natural Gas Annual</i> .	P		P		P
1994 Natural Gas Annual Volume 2 data Self-extracting file containing historical information (in comma-delimited format) found in the tables in Volume II of the 1994 <i>Natural Gas Annual</i> . Annual historical data at the national level are presented for 1930-1994. Annual information by State and region is presented for 1967-1994.	P		P		P
1993 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" for 1993.	P				P
1994 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" for 1994.	P				P
Data archive of historical reserves estimates for U.S. Crude Oil, Natural Gas, and Natural Gas Liquids. National, State, and State subregion data published in the reserves balance tables of <i>U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves</i> from 1977 forward.	P				P
MONTHLY DATA					
Natural Gas Production, United States by Month 1989-forward	P	P		V	
Natural Gas Supply and Disposition, 1989-forward	P	P		V	
Natural Gas Imports and Exports 1989-forward	P	P		V	
Natural Gas Underground Storage: United States Total by Month 1989-forward	P	P		V	
Natural Gas Prices: United States Total by Month 1989-forward	P	P		V	
Natural Gas Consumption by Sector: United States Total by Month, 1989-forward	P	P		V	
SELF-EXTRACTING COMPRESSED DATA FILE ARCHIVES					
Natural Gas Consumption and Prices, for most recent 2-3 years	P	P			
Natural Gas Consumption and Prices, for 1984-1992	P	P			
OTHER REPORTS					
Natural Gas Weekly Market Update Analysis of current price, supply and storage data along with a two week snapshot of the weather in four distinct metropolitan areas.	V			V	

V=Viewable

P=Post-Processable

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the temperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent: Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oil in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.